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D E V E L O P M E N T R E S E A R C H D I G E S T

Volume I - Number 3 January 1963

A journal of
selected excerpts, summaries and
reprints of current materials on
economic and social development

Prepared by the NATIONAL PLANNING ASSOCIATION
Frances M. Geiger, DIGEST Editor

for

AGENCY FOR INTERNATIONAL DEVELOPMENT
DEPARTMENT OF STATE
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CONTENTS

Most of the pieces in this issue are concerned with understanding the human element in development and with improving human skills. These are contained in sections on planning, the sociological factors in development, and some current training methods, programs, and institutes in various development fields. An introductory section deals with economic development in general.

ECONOMIC DEVELOPMENT

PLANNING

SOCIOLOGY OF DEVELOPMENT

TRAINING

ECONOMIC DEVELOPMENT

ECONOMIC PROBLEMS OF DEVELOPMENT

W. Arthur Lewis

[From Restless Nations: A Study of World Tensions and Development; Council on World Tensions; New York, Dodd, Mead and Company, 1962, pp. 68-85.]

[Dr. W. Arthur Lewis, one of the world's leading authorities on development economics, discusses some of the main problems faced by underdeveloped countries and ways which could assist in overcoming them. In this essay, Dr. Lewis expresses his views in plain, forceful language, sweeping away some unrealistic expectations and easy panaceas.

The essay was prepared for the Conference on Tensions in Development held at New College, Oxford University, in the summer of 1961, under the sponsorship of the Council on World Tensions. Also included in Restless Nations are the other papers delivered at the Conference, dealing with political tensions, international development activities and education.

Of the seventy Conference participants, half came from African, Asian, and Latin American countries and half from Europe and North America. They included many

A reprint of most of the essay begins on the next page.

W. Arthur Lewis is Principal of the University College of the West Indies, and was Deputy Managing Director of the United Nations' Special Fund. He has also been economic adviser to the governments of several countries in the Far East and Africa. Among his books are Principles of Economic Planning (1959) and The Theory of Economic Growth (1955).

distinguished persons from the fields of political and international affairs and from academic and research circles, as well as a number who have had and still have leading roles in development planning and in current programs of international aid.

The Council on World Tensions is a private, non-governmental, and non-partisan organization, directed by leaders in national and international affairs. It conducts high-level studies and international conferences on practical steps toward peace based on better economic and social conditions for all peoples. These projects are carried out in cooperation with universities in different parts of the world.

In the summer of 1962, a Conference on Tensions of Development in the Western Hemisphere was held in Salvador, Brazil, under the joint sponsorship of the Council and the University of Bahia. Future conferences are planned in Asia and Africa.]

[Following is a reprint of most of Dr. Lewis' paper:]

The Discords of Economic Growth

The decade and a half since the end of the war has, over-all, been a good period for the underdeveloped countries. Commodity prices have been at levels yielding much better terms of trade than before the war. Real income has risen faster than ever before. Social services have improved. Yet, paradoxically, there is greater mass discontent in nearly the whole of Latin America, the Caribbean, the Middle East, and parts of Asia and Africa.

It would be easy to attribute this discontent to disillusionment following upon excessive promises by politicians. Nationalist agitation has led some people to expect political independence to be followed by an economic millennium. However, this explanation is insufficient, since the masses of the people are not so easily taken in by words. For the real causes of discontent, we should look rather to changes in the relative positions of various groups which have generated frictions.

The basic problem is that the fruits of economic development are not spread evenly throughout the population. We may describe the process of development crudely by saying that in each country there is a small modern sector (which is by definition those parts of the economy where rapid development is occurring) surrounded by a large backward sector (which usually includes peasants, handicraft workers, petty traders, domestics, and casual workers). Ultimately the modern sector will expand to take in the whole economy, but in the meantime the modern sector can become quite prosperous with relatively small effect on the backward sector. The backward sector actually suffers if the modern

sector competes with it (for example, if factories put the handicraft workers out of business, or if construction equipment dispenses with casuals). On the other hand, the backward sector gains in so far as the expansion of the modern sector offers an expanding market for food, or raw materials, or services. Inside the expanding sector, profits, salaries, and wages are high; elaborate social services are provided; and the benefits of urbanization (pipe water, schools, buses, cinemas, hospitals, subsidized housing) are enjoyed. Outside this sector, disturbance may well exceed benefits.

The causes of unrest can, therefore, be isolated as follows:

1. Development creates unemployment as well as employment. Normally it creates more employment than unemployment, but if investment is concentrated more on introducing labor-saving devices into old industries than on introducing new industries, the net effect may be unfavorable to employment. This is an acute problem in some West Indian islands. Those who hold jobs are much better paid than ever before, but there are fewer jobs. Even where the net effect is favorable to employment, some people suffer, for shorter or longer periods.

2. The high incomes earned in the more productive industries (e.g., oil) create tensions in other industries. Civil servants, bus conductors, plantation workers, farmers, and persons in industries of slowly rising productivity keep trying to catch up, through trade unions, farmers' associations, or other political activity. The more rapidly some industries develop, the greater the industrial and political unrest in other industries. Paradoxically, there is least mass unrest in those countries where economic development is slowest. Unrest is also greater where development occurs in pockets scattered throughout the country than where it is all in one place, since more people are excited by the disparity between their incomes and those of the lucky few who get jobs in modernized industries.

3. Sooner or later the high earnings in the modern sector pull up wages in the backward sector, whether through trade union activity or through simple refusal of workers to accept less, in the backward sectors, than their relatives earn in modernized sectors. This can have disastrous effects on employment in overpopulated countries. In a country like Egypt or India, starvation is rare until the trade unions arrive, because society makes innumerable useless jobs as a means of distributing the national output. Every office has twice as many clerks as it needs; every enterprise has innumerable messengers; even lower-class families are expected to keep their quota of servants; and no respectable person does any manual labor. This is feasible because wages are a shilling a day. Everybody knows that such a wage barely provides food, and no employer expects any serious quantity of work in return for it. The system is unorganized but most necessary poor relief.

When economic development, the trade unions, and the efficiency experts get to work, the whole picture changes. Wages shoot up to ten shillings a day; the surplus clerks, messengers, and domestic servants can no longer be retained by their employers and are dumped on the labor market or, as in Jamaica's case, are forced to emigrate.

4. The prosperity in areas where economic development is greatest attracts people from other areas and creates a serious unemployment problem in those areas. In Jamaica, for example, the more jobs you create in Kingston, the more unemployment you have in Kingston. There is little overt unemployment in the backward part of the economy because, in the absence of social services, every person has to attach himself to some means of subsistence. Excessive population, if it exists, shows itself not in overt unemployment but in the small size of family farms, or in excessive numbers in domestic service or petty trading. So, paradoxically, it is those parts of the economy which are developing most rapidly that account for the most stubborn unemployment statistics.

5. In the modern sector, the profit ratio is very high, which is why this sector is attracting so much investment. Tax exemption to new industries makes net profits still higher, to the disgust of entrepreneurs who receive no tax exemptions. If, in addition, the modern sector is being developed largely by foreign capitalists who export part of their profits, nationalism and racialism may be added to other discords.

There is no easy solution to these problems. Discord is part of the cost of economic development. One can suggest palliatives, such as better machinery for preventing or settling industrial disputes, a more determined effort by governments to transfer (through taxation and expenditure) some of the benefits of development from the modern to the backward sector, and generally a better understanding of the process of economic development. But some discord is inevitable. Once a community begins to cease to be backward, nostalgia for the good old days of social stability is out of place. In this world of paradoxes, one may note again that possibly the surest way to diminish the discords of development is to have still more rapid development. The discords spring from the contrasts between the modern and the backward. If the modern sector expanded faster, and the backward sector diminished more rapidly, the fruits of economic development would be spread more widely and there might be less unrest.

The Structure of Salaries

The range of earned incomes is much wider in poor than in rich countries, because the shortage of skills results in a wider differential between skilled and unskilled earnings. The gap is fantastically wide. For example, a primary school teacher is paid about $1\frac{1}{4}$ times the

per capita national income in Britain and in the USA, about 3 times in Jamaica, about 5 times in Ghana, and about 7 times in Nigeria. Or, to take another example, a graduate just leaving the university will in Britain receive a salary about equal to that of a miner; but in former British Africa a graduate's salary is at least 7 times that of a miner.

One result of this gap is to make the public services extraordinarily expensive in poor countries. To give eight years of primary education to all children would cost a much larger percentage of the national income in Nigeria than it would in the USA. It is similarly very expensive to provide medical services, agricultural extension, or any other form of service. Thus the countries which consider themselves least able to afford to pay taxation (in terms of percentage of national income which can be spared) are also those which get least value for their money (also in terms of percentages).

In Africa, salaries in the upper echelons are actually higher than in Europe, in terms not only of percentages but of absolute money. This is because Africa recruits its upper echelons in Europe and has to pay higher emoluments (not to speak of passages and leave) than Europe in order to attract. This goes pretty far down the scale. It applies not only to university graduates, but also, because secondary education is so poorly developed, to mechanics, nurses, bookkeepers, secretaries, and similar intermediate grades. In consequence, almost any operation costs more in Africa than it does in Europe. For example, Africa cannot manufacture any commodity competitively unless it has the protection of heavy transport costs.

India does not have this problem, because her education policy was different from Africa's in that it concentrated upon higher rather than primary education. India has only about half her children in primary school, whereas she has proportionately more students in universities than there are in Britain. University graduates are paid only about one-third to one-half as much in India as they are in Africa.

The existing salary structure is a tremendous handicap to African development. It is also one of the causes of wage inflation, since the spacious houses and luxury cars of the middle classes are a perpetual incitement to the masses. Ultimately the situation will right itself, as the relative increase in the number of educated persons reduces the gap. Since it is difficult to reduce salaries in terms of money, presumably the adjustment will come through a rise in earnings at the bottom end of the scale, in the course of inflation, without proportional increases at the top.

Meanwhile, the situation could be improved somewhat by recognizing that it is morally right to pay more to expatriates than to the local

person for doing exactly the same work. This proposition is denied vigorously by most Africans whom it affects, and since they tend also to have political power, they are often effective not merely in maintaining the existing gap between themselves and other Africans, but even in widening the gap still further. The political consequences of the inevitable readjustment cannot be ignored. In every country, as the proportion of educated persons increases, the grumbling of the educated at their failure to maintain the differentials which they expect (including their inability to afford so much domestic or other personal service) is a universal phenomenon. But the problem has seldom been as great as it is in Africa today. Since this is a matter on which there is so much feeling, it ought to be made clear to all educated Africans that they are exploiting their uneducated brothers, and that they will not be able to get away with this for much longer. These remarks apply equally to the West Indies.

Urbanization

In every underdeveloped country, one or two towns are growing at excessive speed -- faster than jobs, houses, police, water supplies, schools, hospitals, buses, or other amenities can be provided. Hence, large areas of these towns are becoming slums, haunted by the unemployed and the juvenile delinquent. We can attribute these urban explosions to three main causes:

1. New employment opportunities tend to concentrate in one or two locations, and, as we have seen, unemployment tends to be greatest in the very places where employment opportunities are growing most rapidly. Industries which are not tied geographically to the location of a particular raw material tend naturally to settle in the largest market, which may also have the best facilities for recruiting skilled labor, for banking, transport, maintenance of equipment, and so on. Hence, there are cumulative tendencies in industrial location; it is the centers which are already big that attract the most new industries.

On the other hand, one reason why industries go to these centers is that they do not themselves bear the full cost of excessive concentration. Workers are attracted away from areas which may already have schools, hospitals, and other facilities, into these new centers where the full range of public facilities now has to be provided. And the cost of this falls not on the new industries which cause it, but on the government, and through the government on industry as a whole, wherever it may be located. Similarly, the new industries do not bear the social costs of excessive urbanization -- the slums, the juvenile delinquency, the long journeys to work, and so on. If every factory had to bear the full cost of its location decisions, many more factories would avoid the big cities.

Governments are justified in influencing location away from big cities. A system of licensing is the most obvious but also the most tiresome method of achieving this end. Less effective, but also less frustrating, is to select a number of locations outside the big cities (preferably in existing small towns with potentially easy transportation), build there some industrial estates, and offer sites on easy terms. Thus, industrial opportunities are more widely dispersed throughout the country, and pressure is taken off the big towns, which are already unable to cope with their existing populations.

2. A second cause for the explosion of the big towns is that governments, like industrialists, tend to spend most on one or two capital or other large cities, so that the population is drawn to these cities for opportunities, for schools, medical services, pure water, and other public services. This is partly because government ministers live in the capital city, are peculiarly conscious of its needs, tend to exaggerate its importance in the country, and are anxious to make it a showpiece for foreign visitors as well as visitors from other parts of the country. Once when I pointed out to a Prime Minister that he was proposing to spend 50 per cent of his development program on his capital city, which had only 5 per cent of the population, he was quite surprised. "But why not?" he asked. "Surely, when you think of England you think of London, when you think of France you think of Paris, and when you think of Russia you think of Moscow." "No," I replied. "When I think of England, I think not of London, but of Manchester, and this is precisely why I oppose spending half your money on beautifying the capital."

A further reason for excessive concentration on the capital is the weakness of local government in these countries. Too much public expenditure is determined at the center, and too little in the subordinate units of government. A further corollary is that the best politicians are attracted to the center. Every politician would rather be a minister than a mayor; most would rather be even a back-bencher in the capital than a mayor in the provinces. So the provinces are starved of talent and incapable of solving their administrative problems. Public affairs would improve immensely if the party leader would endorse no candidate for Parliament until he had served at least one term as a member of a local authority. If by these or other means one could get some powerful talent into local or regional administration, development funds would be more widely dispersed. If for no other reason, they would oppose the system of setting up a central unit, located in the capital, to make a development plan for the whole country, and would insist instead on having the plan made at the grass roots, by a number of regional planning units whose wishes the center would have to respect.

Just as the Government ought to select a limited number of places for industrial development, so also it should select some small towns,

preferably the same, which are to be encouraged to grow more rapidly than the existing two or three big towns -- and which will be made especially attractive by ensuring a full range of public services, including schools, pure water, electric lighting, hospitals, and so on. Very few countries have given special thought to planning geographical distribution in such a way as to develop a significant number of medium-size towns, in order to prevent excessive concentrations in one or two large towns.

3. A third cause of over-urbanization is an excessive output of primary school leavers. Many new African countries have made a major mistake in their educational programs. Instead of concentrating scarce resources on increasing the output of skilled and semiskilled persons, through secondary, technical, professional and subprofessional institutions, they have concentrated on expanding the primary school system. Some have actually increased the intake into the first primary year from 20 to 80 per cent of the age group in less than ten years. The result is an acute shortage of skilled manpower, accompanied by a surplus of primary school leavers who have difficulty in adjusting to economic life.

In a society where only 20 percent of the age group enters primary school, and only 10 per cent completes the course, there is a high premium on literacy, and the primary school leavers learn to expect well-paid clerical jobs in towns. This expectation remains even after a swift increase in primary school numbers, with the consequence that the towns are soon flooded with unemployable youngsters. Mere adjustment of primary school curricula, to emphasize rural life and occupations, does not solve the problem. Any good primary school widens young people's horizons. When they leave they expect something much better than the conditions in which their fathers live. Normally, the wage of an unskilled laborer (which is all that a six-year primary education produces) should be about one-third of the average income per occupied person; but a primary school leaver in Africa expects about twice the average income per occupied person. It is obvious that if literacy became universal it would be impossible to pay every literate person twice the average income. Meanwhile, if one wanted to prevent frustration, it would be necessary to limit the output of the primary schools to the rate of growth of those modern sectors of the economy which can afford to pay twice the average income. There is little hope of attracting primary school boys into an unreconstructed agriculture based on three acres and a hoe. One must regard the purpose of the primary school as to prepare young people for an economy which is undergoing agricultural and industrial revolutions. If the output of school leavers is substantially higher than is appropriate to the rate at which the economy is revolutionizing itself technologically, widespread disillusionment is inevitable.

Education should not be entirely subordinated to economic development. Neither is it wholly bad to have a surplus of partly educated young people, who are driven by frustration, or by tension, to make a place for themselves in the world. Nevertheless, it is sensible, in planning education policy, to put more emphasis on the higher-level skills whose shortage holds back development, and to give the economy two decades to attain universal schooling, rather than trying to complete the task within ten years.

Agriculture

In Africa and Asia, three-quarters of the people are engaged in agriculture on a small-scale basis. To increase the output of these people is the fundamental problem of economic development. It is also the most difficult problem, and the one where least progress is being made.

One approach is to reduce the relative numbers in peasant agriculture. It is almost impossible to reduce the absolute numbers in agriculture. Population grows so rapidly that even to keep the absolute number in agriculture constant, by creaming off the increase into other occupations, is quite an achievement.

As we have seen, the spread of education produces a drift to the towns faster than the towns can create new jobs. Shortage of capital for industrialization is not the only obstacle. (Actually, only a fraction of the new jobs is provided in factories; the growth of service employment -- transport, entertainment, medical service, education, retail distribution, hotels, and so on -- is even more significant in terms of numbers employed.) Even if there were enough capital and skilled manpower to produce non-agricultural jobs for all those who wanted them, agricultural stagnation would still inhibit economic development, in two ways. First, the expanding sector needs agricultural produce, both food and raw materials. Second, if agriculture is stagnant, a shortage of agricultural products, with high prices, inhibits nonagricultural expansion.

The expanding sector is driven to import agricultural products, but unless it can export correspondingly an increasing amount of its own products, this merely produces a balance-of-payments crisis, with resultant limitations on imports. Accordingly, the first disadvantage of agricultural stagnation is that it limits the rate of economic development to the rate at which foreign-exchange earnings can be increased through additional exports of minerals, manufactures, or such services as tourism. The second disadvantage is that it limits the market for the goods produced in the expanding sector. Factory workers consume only a fraction of their own produce; they need to sell the rest in exchange for food and other non-factory services and commodities. If agriculture is stagnant, it offers only a stagnant market and

inhibits the growth of the rest of the economy. The core of the doctrine of "balanced growth" is that neglect to develop agriculture makes it more difficult to develop anything else.

In the half century before the First World War, when Asia, Africa and Latin America were first brought into the network of world trade, the mechanism was response to the agricultural needs of Europe by supplying food (especially sugar, tea, coffee, cocoa) and raw materials (especially cotton, rubber, and oil seeds). Rapid increases in demand established prices for these crops which the peasants found very favorable, and millions of acres were devoted to commercial production, even at the expense of ceasing to grow food for home consumption. The underdeveloped countries still earn most of their foreign exchange by exporting agricultural commodities, but the momentum of this growth has slackened. Population growth has diminished in the Western world, and at higher levels of living the demand for foodstuffs is inelastic. The demand for the staple raw materials has also been restricted by the rise of synthetic production, using materials more cheaply available in or to the developed countries. The share of food and raw materials in world trade, which was constant from 1870 to 1939, seems to have diminished sharply since the Second World War. Underdeveloped countries taken as a whole can no longer solve their problems by exporting agricultural raw materials at favorable prices, though opportunities still exist for industrial countries to do so. In future, the agriculture of these countries must concentrate mainly on supplying an expanding home market, mainly with food, and to a lesser extent with raw materials.

It is possible to bypass agriculture altogether by finding other sources of foreign exchange, such as mineral exports or tourism. Failing these, necessity (in the shape of high-population density) will launch a community into exporting manufactures -- as it has driven Hong Kong and Puerto Rico in recent years, as it previously drove Japan, Germany, and Britain, and as it will soon drive India and Egypt. But exporting manufactures requires high levels of organization and determination, and many countries needing this solution do not possess the dynamic drive to succeed at it.

If empty land is available, the backwardness of the peasantry can be evaded by settling new lands on new lines. Mexico has solved its production problem by settling its new lands in large-scale plantations, run on modern, scientific lines. In Israel, most of the new lands are in small-scale settlements, but the new farmers hold these lands on strict tenures, which require them to plant approved seeds and to follow recommended practices. It is certainly not sensible to invest large sums in roads, irrigation projects, or terraces, and then hand these lands over to old-style peasant cultivation without restraints. Where new land can be made available, the agricultural problem can be solved by settling this land on terms which ensure scientific agriculture.

This may well be the solution for most of Africa and Latin America, where it is possible simply to ignore the existing farmers and start afresh on new lands. In Asia, this can be only a marginal solution, since the amount of new land is relatively small. However, Japan has shown that we do not have to write off existing peasant agriculture as irredeemable. Peasants can be taught, through agricultural extension, to use better seeds and fertilizers and pesticides; irrigation facilities can quadruple their outputs; and cooperative organization can simplify access to finance and to markets. All this costs a lot of money, but so does investment in factories or plantations. Failure to solve the problem of stagnant peasant agriculture is due principally to failure of governments to take the responsibility for providing large sums of money for this purpose.

Behind this failure has lain intellectual myopia. The most obvious feature of the past century and a half of development in the West has been urbanization with industrialization. It took some time to realize that this was made possible only by an equally profound revolution in agriculture, which increased the average farm family's output from enough food to feed one and a half families to enough food to feed ten families. Most underdeveloped countries have now grasped this point, but action is still slow.

Entrepreneurship

Adam Smith insisted that a propensity to barter and truck is an essential part of human nature. Certainly the underdeveloped countries have no shortage of the commercial instincts (despite all that we hear about religious and cultural barriers to economic growth), and their peoples demonstrate as great a fondness for trading and for taking risks as one can find anywhere. There is a marked surge of entrepreneurship in road transport, in entertainment, and in building. Why, then, is there a shortage of entrepreneurship in manufacturing industry? There are several answers:

1. First, because of the low purchasing power of the great majority of the people, resulting from agricultural stagnation, the home market for manufactured goods is relatively small. The world market for manufactured goods is very large, but success in this market requires sales contacts which the small Asian or African entrepreneurs do not possess.

2. Most underdeveloped countries are short of skills. Entrepreneurs are forced to import not only university graduates, but in Africa even the products of secondary level and upper primary forms. As we have seen, this makes it very expensive to manufacture in Africa any commodity which does not have the natural protection of heavy transport costs. The remedy, now recognized, is to give the highest priority in

education policy to the development of secondary and post-secondary education, including technical training.

3. A third handicap is lack of experience in administering large-scale enterprise. It is not enough to have a flair for trade, or a propensity to gamble, or even a capacity for leadership. One must also have experience of the routines which hold a large organization together. Africans have not been able to acquire this experience, because racial restrictions have prevented them from moving upwards in such organizations, whether in private business or in government. This obstacle, too, is now on the way out as political power passes to Africans. It is also possible to help small entrepreneurs through provision of advisory services and through extension classes. One lesson which will have to be learned is that the success of large enterprises depends upon making competence the test for appointment or promotion. Most underdeveloped countries still belong to the pre-competitive era, where advancement depends upon ties of kinship, of friendship, or other obligations. This disregard of competence is one reason why it is difficult to get things done properly, or cheaply, or promptly in such countries.

4. The fourth handicap is lack of capital in the amounts required for large-scale enterprise. This is not an obstacle in those industries where it is feasible to start on a small scale and expand. Since industry's capital derives primarily from reinvestment of profits, it is quite feasible for a small African or Asian business man to generate, in the course of a lifetime, all the capital needed to support the equity of a pretty large undertaking. (Presumably, this is what the chicken/egg economists mean when they say that it is not capital which creates development, but development which creates capital.) What cannot yet be done, except by a very few in India or Latin America, is to establish the type of business which has to be big from birth, such as the steel mill, the copper mine, or the oil refinery. In Africa even the textile mill is beyond the resources of most domestic entrepreneurs. In this respect, Africa is less fortunate than Asia, where there have always been large fortunes, founded on the ownership of land and the profitability of sharecropping, which could at the crucial time of industrialization be diverted into financing even the largest industrial enterprises -- with some kind of partnership with foreign capitalists where this was needed for technical or administrative skills. Africa is an egalitarian continent. It will, therefore, need foreign capitalists for a longer period than was necessary in Japan, or India, or China.

5. Finally, entrepreneurs flourish only in a climate that is favorable to them. Much has been said of the need to make conditions attractive for foreign capitalists, and especially to promote confidence in the government's good faith. Similar considerations apply to the encouragement of domestic entrepreneurship. Openly declared hostility of

governments, a network of restrictions, licensing, trade union activity, and social snobbery towards fortunes made in trade, all serve to discourage entrepreneurial activity and to persuade the bright young man to devote his energies to other fields. All former British territories have inherited the social prejudices of Queen Victoria. Young talent is attracted to the professions, to the civil service, and to politics; business enterprise is only for those whom lack of fortune or lack of the capacity to pass written examinations deprives of the opportunity to acquire superior education. This also is breaking down, as the love of money begins to corrode even the social snobbery of the better educated.

Public Expenditure

Economic development requires an adequate framework of public services -- of roads, harbors, schools, pure water, hospitals, telecommunications, police, efficient administration, and so on. The government of an underdeveloped country needs to spend at least 12 per cent of the national income on recurrent costs, and about 8 per cent of national income on capital costs, making 20 per cent in all. Distribution of the recurrent costs is, roughly, as percentages of national income: education, 3; public health, 2; economic services (roads, water, agriculture, housing subsidies, industry), 4; and general administration, 3. This is more than richer countries need to spend on these services, even though they provide much better services. As we have already seen, because of the relative scarcity of educated people, the ratio of the salary of a public servant to per capita national income is higher in poor than in rich countries, so it would take two to three times as great a percentage of national income to produce the same standard of public service in poor as in rich countries.

As for capital expenditure, developing countries need to devote [in both the public and the private sectors] about 20 per cent of national income to this purpose, which corresponds, after allowing for depreciation, to about 12 per cent annual net investment, associated with growth of national income at around 4 or 5 per cent per annum. Of the 20 per cent gross investment, about two-fifths, or 8 per cent, is in the public sector, in the form of roads, schools, water systems, harbors, hospitals, electric power, research stations, telecommunications, and other public facilities.

Moreover, given the shortage of private savings in these countries, governments cannot rely on financing public investment by borrowing from private savers. Some loans can be raised abroad, and some grants-in-aid may be obtained, especially by countries closely allied to France or to the United States. But most of the underdeveloped countries have to lift themselves up by their own bootstraps, and their governments must finance public investment out of public saving, that is to say, out of a surplus of taxes over expenditures on current account.

There is no fundamental reason why the government of any country should not raise 20 per cent of the national income in taxes. In Asia, which is the poorest continent, landlords have habitually taken half the peasants' produce as rent, for squandering on show and useless monuments. The principal reason why taxation is so low in most of Asia and Africa -- typically 10 to 12 per cent of national income, or less -- is that these countries have derived from metropolitan powers, who considered the maintenance of law and order to be their principal function, and who therefore needed to raise only 5 to 10 per cent of national income for their limited purposes. The countries which now approach 20 per cent, such as Ghana and Ceylon, have got there by deciding to impound for public purposes a considerable part of the windfall improvement in the terms of trade which began shortly after the end of the Second World War. Most Asian or African governments were too slow to seize this opportunity. They can still double the share of taxes in national income over the next ten or twenty years, if they wish to do so, and some, notably India and Nigeria, have already begun the climb. Others, lacking political courage, hide behind the erroneous beliefs that their economies are too poor to bear more than 8 per cent of taxes, or that their peculiar economic structure makes it technically difficult to devise taxes which would yield 20 per cent. One cannot take seriously any government which claims to be development minded but which raises only 12 per cent or less of national income in taxes.

Foreign aid is frequently conceived as potentially filling the gap between what countries need and what they can afford to do for themselves. However, if foreign aid is to help countries to become self-sufficient over a reasonable period -- say, not more than two decades -- it should be used to encourage most those who help themselves most.

SOME FACTORS IN HISTORICAL EXPERIENCE RELEVANT TO CONTEMPORARY ECONOMIC DEVELOPMENT

H. J. Habakkuk

[From "The Lessons of History," paper presented at the International Congress on Economic Development of the International Economic Association held in Vienna in September 1962.]

These are excerpts from the paper.

History contains a large number of case studies of successful and of frustrated economic development. From the detailed study of these it is possible to gain a general sense of the combinations of circumstances which in the past have been favourable to development. But, it is not feasible to concentrate this experience into anything which can be dignified with the name of lessons of history. The factors favourable to development were so varied and have historically combined in so many different ways that I see no possibility of isolating a small number of crucial variables. All I propose to do here is to consider the historical experience on several points which, it seems to me, have particular relevance to the problem of development at the present day.

Widening of Markets

The first point relates to the initiating factor in development. Here, if one has to single out an influence, priority must be given to the widening of markets. Under the pressure of demand, old attitudes were modified, social obstacles to growth were removed, new methods were invented, and specific bottlenecks -- shortages in entrepreneurial skill, in skilled labour

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and capital -- were overcome. There are, it is true, some historical cases where the capacity to respond to widening markets was temporarily checked by some particular shortage. But, if one confines one's attention to those areas which were successful in developing in the century before 1914, the main dynamic was provided by increases in market possibilities rather than by independent changes in the supply of factors of production.

The shortage it proved most difficult to alleviate was that of entrepreneurs. In countries with a long history of previous growth, a supply was readily forthcoming from a wide variety of sources -- from landowners, merchants, and small masters in industry of the pre-factory type. In a country which lacked an adequate class of indigenous entreneurs, but where other countries were favourable, entrepreneurs were imported. The foreign entrepreneurs called forth local entrepreneurial ability; they stimulated competition and imitation; and they provided opportunities for local inhabitants to acquire industrial techniques and administrative experience. In the successful nineteenth-century industrialisations, even this shortage proved to be very short-lived, once a stimulus had come from the side of demand.

The increase in market possibilities arose in a variety of ways. The orders from government-sponsored railways -- directed to local industry by a tariff or by more direct means -- provided a market for nascent heavy industry in a number of countries. In some cases, steps were taken to secure for the local industries the domestic market in goods which had previously been imported. Once a wide range of industries had been established, there were possibilities of a cumulative process of balanced growth. But the possibilities were restricted in the early stages of economic growth, which are the stages of most interest in the present context. This is why in several of the most successful of the older industrialisations, exports played an important role and in a number of them foreign demand was the source of a substantial part of the initial impetus.

Potential export markets were so much greater than the domestic market that an area which had a marked advantage in a particular line of production could expand on the basis of exports in a way which would have been impossible had it been restricted to the domestic market. This growth did not necessarily take the form of industrialisation. The comparative advantage of some areas was so decidedly in primary production that industry was inhibited, except for the processing of raw materials and the manufacture of the simpler consumer goods. But in most of them the increase in incomes sooner or later generated a local market sufficiently large to support a significant industrial base.

It is often argued that the circumstances which made international trade so effective an engine of growth in the nineteenth century were

essentially temporary. Clearly, in principle, the rapid growth of one area is capable of inhibiting, as well as stimulating, growth in less developed regions. Were the circumstances, which in the nineteenth century ensured that growth in one region exerted a powerful stimulus over a wide area, peculiar to a bygone phase of growth?

There is one sense in which nineteenth-century developments were unique, the importance of textile exports as a generator of growth. Both Britain and Japan exported textiles to areas which were sufficiently developed to afford such imports but not sufficiently developed to make their own textiles. This stage of development was from its very nature temporary and it is unlikely that textile exports will ever again be a springboard for industrialisation.

The nineteenth-century experience was exceptional in a more fundamental sense. The regions of recent settlement -- simply because they were areas of abundant land -- had a very decisive relative advantage vis-à-vis the industrial areas in the production of foodstuffs. The regions of recent settlement were also particularly attractive to European migrants and these migrants were a powerful factor in the diffusion of advanced technology. Moreover, the fact that these areas were peopled from Europe and shared European institutions facilitated a movement of capital. Most of them also were -- again because of the abundance of land -- areas where incomes were high from the start and where, therefore, there was a substantial market for manufactured goods -- goods moreover of the same general type as those produced in the older industrial areas.

The poorer, more densely populated and long-settled areas of primary production also enjoyed a greatly increased demand for their products in this period: cocoa, palm oil and ground-nuts from West Africa, for example, coffee from Ceylon, tin and rubber from Malaya. The reaction of these areas did not of course fall into a uniform pattern -- there was indeed a great diversity of response -- but there are certain characteristics common to most of them. The increase in production was achieved by an increase in the total resources employed in production and did not lead to cumulative improvements in productivity. It is easy to underestimate the changes in these countries produced as a result of the increase in exports but, as a broad generalisation, it remains true that in their case international trade as an engine of growth did not generate enough power to stimulate a cumulative expansion.

Why did these economies fail to respond more vigorously to the stimulus of foreign demand? The answer does not seem to be primarily the absence of overhead capital, for at least some of these areas, e.g. India, were provided with railways and port facilities; and banking systems were also introduced One reason that has been suggested was that these areas were not capable of replacing the primary production

of the more advanced areas. While Australian and North American wheat expanded at the expense of European wheat production, tropical products had to depend for their market exclusively upon such increases of demand as flowed from the rise of income and change of taste in the advanced economies. This was certainly an important difference. But, as we have already said, the demand for the products of these undeveloped areas was in many cases increasing rapidly. I am inclined to think that a more important difference is in the technological characteristics of the production functions of the commodities which these areas produced for export. These technological characteristics influenced the extent to which an export sector induced subsequent developments because they determined the nature of the inflows of labour and capital and the distribution of income within a particular region. And, it has been plausibly argued that the export of a plantation-type commodity was less likely to stimulate growth than a grain crop or the production of livestock, commodities better suited to production by family-size farms. One can think of several other explanations of greater or less force according to the particular area in question. But, one explanation, which seems to be fairly generally relevant, is the persistence in these areas of traditional agrarian structures unfavourable to the transmission of the impulses derived from foreign trade.

Agrarian Improvement

This leads to the second point at which historical experience bears with particular relevance on the present: the role of agriculture. All the successful nineteenth-century industrialisations were accompanied in their early stages by an increase in agricultural output, and in the countries of Europe -- which are the most relevant for the purpose -- this increase involved in many cases not only the introduction of new techniques but the transformation of the system of land tenure and ownership. This increase in agricultural output is not to be regarded as a pre-condition of growth, if only because it usually accompanied rather than preceded the acceleration of growth. It is rather a part of the growth which requires explanation, but an essential part in the sense that, with the possible exception of Holland in the seventeenth century, there are no cases of successful growth where unresponsiveness of domestic agriculture was made good by imports of agricultural products. Even Britain and Japan did not begin to rely heavily upon such imports until relatively late in their development.

This coincidence of successful development and agrarian improvement does not seem to be accidental. For agrarian improvement performed certain functions which could not have been performed by imports of food, even if these had been available on very favourable terms. Broadly speaking, it performed four functions:

(a) It facilitated the supply of labour to industry; for even where there was surplus labour, in some sense, in agriculture

before the transformation of the agrarian structure, it was often not available to industry, or was available only on terms which gave small, dispersed handicraft industry an advantage in relation to factory industry.

(b) The increase in agricultural productivity facilitated investment. Where the government taxed agriculture in order to promote industry, the higher the level of productivity in agriculture the easier the burden was to bear. Where the finance for industrial investment was derived mainly from industrial profits, the increase in agricultural productivity prevented the appearance of the curb on capital accumulation most feared by Ricardo: the rise in the subsistence wage as a growing population pressed on limited supplies of land.

(c) In some cases, the agrarian improvements made possible an expansion of exports which helped to pay for imports of machinery and raw materials.

(d) Finally, the increase in agricultural productivity provided a domestic market for industrial goods, and thus a basis for the establishment of new industries.

The function of agricultural improvement which seems to have been of the most general importance was the creation of a domestic market for local industries in the earliest and most difficult stages of their growth. The importance of this consideration is most clearly seen in the case of India in the late nineteenth and early twentieth century -- a country which had many of the pre-requisites for industrialisation (a railway system, indigenous and foreign entrepreneurs, raw materials; and abundant labour) but where agricultural production between the 1880's and the 1930's seems to have remained virtually constant in face of a population increase of nearly one hundred million.

There is probably some contrast between the effectiveness of the techniques available for raising agricultural productivity in open-field Europe in the eighteenth and nineteenth centuries and those now available in most contemporary underdeveloped areas. In Europe, the introduction of root crops and grasses promised a large increase in productivity for the expenditure of quite a modest amount of capital. But, the technical possibilities for agricultural productivity in contemporary underdeveloped areas are nevertheless very considerable, in some cases greater than those of nineteenth-century Europe. The really striking contrast is not in the technical possibilities but in the power of the social obstacles to their introduction. In England, the main social obstacles to the introduction of new techniques had been decisively weakened well before the Industrial Revolution: agriculture was in the hands of capitalist tenant-farmers. In countries like Germany and Russia, where serfdom, the fragmentation of holdings, and communal rights of

ownership or cultivation still survived, the reform of the agrarian social structure was undertaken by the State and pushed through rapidly and with relatively small regard for individual interests, which were sacrificed to the aim of increasing the efficiency of agriculture.

Overcoming the Population Growth Barrier to Raising Per Capita Income

But, not only was the agriculture of most western European countries unusually responsive to an increase of demand; there were also influences working on population which ensured that the forces making for an increase in per capita incomes were not entirely neutralised by an increase in numbers. This is the third point on which history is illuminating.

In most parts of pre-industrial Europe (and in those parts of the world which were settled from Europe) there were powerful and long-established mechanisms tending to keep the increase of population in line with resources. The central part of these mechanisms was the age at marriage and the frequency of marriage. From very early in European history, the social unit was the nuclear family -- the husband and wife and their children -- as opposed to the extended family or kinship group. In the nuclear family, the individual man was responsible for the support of his wife and their children. Thus marriage was, from early times, associated with the setting up of a separate household, and there was a strong tendency for a man to marry only when he could support a separate household, and support it at a conventional standard of living well above the physiological minimum. It is not my intention to trace the roots of the nuclear family back into European history, but I am sure that this institution (and the attitudes to marriage which it implied) was of immense importance in European economic development. It provided a rough and ready mechanism which limited the power of population growth to depress living standards; and in favourable circumstances it made it possible to retain permanently an increase in per capita incomes. For though such an increase had a tendency to stimulate population growth, it also raised men's notions about the standard of living which they expected before they embarked on marriage.

This is one respect in which European experience differed from those areas, e.g. India and China, where some form of kinship group or extended family prevailed -- the family which covered several generations or several degrees of relationship. In these extended families, the obligation to support children was much more widely diffused than in the nuclear family and much less firmly fixed on the father; and the obligation to have children, in order to extend and continue the group, was much more powerful. Marriage was not directly linked, as in Western Europe, to the establishment of a new household; the newly married couple took their place in the existing family household. As a result, the age at marriage in such areas was lower and the incidence of marriage higher than in Europe. This seems to have been a difference of long standing and to

provide the principal reason why the living standards of India and China were below those of Europe before the Industrial Revolution. Compared with pre-industrial Western Europe, population growth in countries such as India or China was, therefore, determined more by variations in mortality than by variations in fertility, and for this among other reasons it responded more rapidly to any improvement in economic conditions. There was, therefore, a much more serious population growth barrier to economic growth.

There is a second feature of European demographic history which is relevant to contemporary economic development. The marked and continuous fall in European death rates did not start until the later nineteenth century, and European death rates did not reach very low levels until the end of that century. By this time, many parts of Europe had already experienced a long period of economic growth. Moreover, by the time death rates had reached low levels, birth rates were already falling. The fall in birth rates was, at least in part, the result of attitudes towards family size and marriage which were of long standing and which ensured that, when an increased number of children survived their early years, fewer would be born.

By contrast, the underdeveloped regions of the contemporary world have experienced a much more rapid fall in death rates. This fall has been the result of foreign medical techniques introduced without major changes in economic standards or in social attitudes. The fall in death rates has taken place before any fall in birth rates, and without demographic mechanisms which, in the advanced countries, helped to adjust the rate of population increase by a reduction in birth rates.

Nineteenth-century Europe was favoured by a third exceptional circumstance. Where population growth did press heavily on resources, the existence in the temperate zones of great regions of unsettled and fertile land provided opportunities for migration, and emigration mitigated the fall in living standards in some areas and helped to make possible a rise in living standards in others.

It is clear that a great many circumstances were responsible for the economic development of Europe, but, if I had to select the two most important circumstances, I should choose the two I have just dealt with: the responsiveness of the agricultural sector and the restraints on population growth. It was because of these that the widening of market possibilities was not brought to a halt but stimulated a cumulative process of expansion. This is the justification for supposing, as a very rough-and-ready generalisation, that what had previously delayed European development was not so much inadequate productive capacity as inadequate demand. The characteristic situation in contemporary underdeveloped countries is obviously different. There the existence of inflationary pressures suggests not a deficiency of demand but bottlenecks on the supply side.

I have concentrated in this paper on the early stages of economic development rather than on the factors which determine variations in the rate of development of advanced economies. My impression is that, in these early stages, the influences which may be broadly defined as social were of greater importance than the strictly economic factors. Some of the most important social influences have not been touched on at all e.g. those which determined the degree of prestige attached to economic achievement in any given society, the sources from which entrepreneurs were drawn, and the amount of optimism they showed.

INTERNATIONAL ECONOMIC ASSOCIATION

The International Economic Association (I.E.A.) is a private professional organization founded in 1950 with the aim of promoting measures of international collaboration to assist the advancement of economic knowledge. At the present time, membership consists of the national professional economic societies of 37 countries all over the world.

The main method by which the I.E.A. attempts to carry out the purpose for which it was formed is by the organization of conferences. These conferences number about 2 or 3 annually and are generally of three types: 1) an annual September conference on some topic of widespread economic interest; 2) regional conferences which discuss economic development of a selected part of the world; and 3) conferences of a rather more specialized nature designed to bring together younger economists in the 35 to 45 age group. At intervals of about 6 years, in order to permit the participation by a greater number of economists, a larger congress is organized, open to all members of associations affiliated with the I.E.A. The Congress held in Vienna in September 1962, which discussed various aspects of economic development, was the second of these larger meetings and was attended by some 600 participants from all over the world.

The papers presented to conferences, together with a summary of the debates, are subsequently published in English, usually by Macmillan & Co., Ltd., London, and where possible in other languages also.

In addition to the arranging of conferences, among other activities, the Association cooperates with UNESCO and other international organizations for the advancement of economic knowledge in various ways, such as the organization of refresher courses for university teachers and the preparation of textbooks and surveys in the field of economics.

Administration is carried out through a Council, consisting of representatives appointed by the member associations and of honorary and coopted members, and through a small Executive Committee appointed by the Council. Communications regarding the I.E.A. should be addressed to: Professor L. Fauvel, Secretary General, International Economic Association, 12, Place du Panthéon, Paris (5^{e}), France.

ECONOMIC DEVELOPMENT PLANNING
AND INTERNATIONAL COOPERATION

/United Nations Economic Commission
for Latin America; Santiago, Chile,
1961, 65 pp./

/This report prepared by the UN Economic Commission for Latin America analyzes the main problems confronting the Latin American countries with reference to the particular forms which these problems take in the Latin American context. The Introduction, reprinted below, summarizes the chief points made in this report which, in its entirety, would be of considerable interest to those especially concerned with Latin American development./

The Contrasts of Development

These are excerpts from the report.

The problem of economic development /in Latin America/ is essentially that of rapidly assimilating the vast resources of modern technology in order to raise the living standards of the broad masses. Considerable difficulties stand in the way of solving this problem, both because of the magnitude of the process of transferring technology and because of the special circumstances in which the problem arises.

These circumstances offer very sharp points of contrast. Modern technology requires considerable capital, which can be accumulated without undue hardship in the more developed countries because of their high level of per capita income. This technology, built up gradually during the evolution of capitalism, has now to be absorbed by the Latin American countries with levels of per capita income and a capacity for capital formation much lower than those of the more advanced countries.

No such contrasts existed in the latter countries, at least not in the acute form in which they are found in the countries now in the course of development. When technology was being developed, innovations were translated into new forms of capital to the extent permitted by savings capacity. Naturally there can be no turning back of the clock to reproduce forms of capital that existed in the more advanced countries long ago, when their per capita income was comparable to that now prevailing in the Latin American countries. Nor does modern technology offer, except to a very small extent, alternative solutions that can be applied when capital is in short supply.

On the other hand, the Latin American countries are not making full use of their savings capacity. The high-income groups tend to follow patterns of consumption that became possible in the more advanced countries only after a long period of development. The existence of such patterns in conjunction with a low average per capita income is due to the fact that income distribution is heavily weighted in favour of the groups that hold a dominant position in the social scale.

Hence, the pattern of income distribution is one of the most serious obstacles to economic development; but it is also a source of social tensions, which lead to increasingly insistent demands for redistribution.

In the development of the more advanced countries, capital accumulation preceded income redistribution, which followed later as the political and trade union power of the masses became stronger. In Latin America the problems of capital accumulation and income redistribution tend to arise at the same time.

Nevertheless, whatever action is taken to make more effective use of Latin America's savings potential, the low prevailing level of income sets limits that cannot be exceeded under the present institutional system.

The High Rate of Population Growth

There are further points of contrast. The falling death rate seems to have been largely a social phenomenon in the historical development of the more advanced countries. It was a consequence of the steady improvement in living conditions; and this improvement also created -- although not on the same scale -- social conditions conducive to a drop in the birth rate.

In Latin America, on the other hand, the fall in the death rate is making itself felt long before those social conditions have been able to affect the birth rate. The fall in the death rate is a technical rather than a social development, due to the rapid absorption of techniques for the prevention and cure of disease.

There is no reason why raising living standards in Latin America should not bring about the same change of psychological outlook, conducive to a lower birth rate, as it did in its day in the more advanced countries. But this process takes time, and meanwhile the rate of population growth has reached an extraordinarily high level, much in excess of anything that occurred during the evolution of capitalism.

This is an extremely delicate problem, for it touches feelings that are rooted deep in Latin American life and cannot be dispelled by purely economic considerations.

The Pressure of Consumption and Capital Formation

Be that as it may, the rise in the rate of growth of the population makes it even more imperative to increase the investment coefficient. But there are strong forces working in the opposite direction. The technique of mass dissemination of information and ideas is propagated much more quickly than productive technique -- another instance of the uneven process of permeation of technique that is a major factor in Latin America's economic development.

As regards consumption, this truth is evident in the tendency of countries that are developing to adopt the way of life of countries with a much higher income level. The broad masses of the population are by no means free from this tendency; on the contrary, it reveals itself with increasing clarity in both individual consumption and social consumption through State expenditure.

The dynamic value of the incessant emergence of new needs and new forms of consumption should not be ignored. It could become a strong incentive to increased productivity and, in some cases, might counterbalance a certain inclination for the rate of personal activity to decline whenever income levels rise.

What should be done, therefore, is not to oppose the techniques for the dissemination of ideas and information but to enlist their cooperation in the service of economic development. With this in view, resolute efforts must be made to promote capital formation. If the broad masses of the Latin American population are easily induced to consume, this does not imply that they are incapable of shouldering the responsibilities of capital formation as well. This is a key point in economic development, since, if income redistribution is not accompanied by a predisposition towards popular capital formation, it will be impossible to bring about a steady improvement in the level of living of the lower-income groups.

The Penetration of Technology and Structural Changes

It is essential that as the assimilation of productive technology proceeds, it should spread to all internal activities in order to rectify one of the most notorious distortions caused by the unevenness with which technology penetrated in the early stages. It has not percolated from the centre to the periphery, as in a series of communicating vessels, in an even flow to all parts of the economy alike. Where natural resources were more abundant so that this was feasible, technique was directed almost entirely towards the development of exports and ancillary activities. It did not move towards the areas that were technically backward where, in fact, pre-capitalist techniques prevailed.

No external effort whatsoever was made to transform this unilateral development structure and to remedy these great technological discrepancies. On the contrary, they all became part of a characteristic concept of the natural order of the economy, according to which, in the international division of labour, the primary functions were relegated to the periphery.

Contemporary productive technology is currently seeping through into internal activities and this entails constant changes in the production structure, in which industrialization plays a dynamic and supremely important part. The resulting changes in internal activity and the concomitant wage increases are progressively strengthening the capacity of the countries on the periphery to retain the fruits of their technological progress in the export field. Without such wage increases, and except in special cases, these results tend to be transferred outwards, the intensity of this outward movement depending upon the degree of disparity in technology and productivity between export and internal activities.

The prevailing system of land tenure is one of the major impediments to the extension of technology, apart from its effects on income distribution. It is common knowledge that productivity is generally very low, particularly in the internal agricultural sector. But this evil cannot be attacked by a mere redistribution of land, without reference to the over-all economic development problem. In actual fact, unless the rest of the economy grows at a satisfactory pace, it will be impossible to absorb the population that is displaced by technical advances in agriculture or to find an adequate outlet for the increase in agricultural production not intended for foreign markets.

The structural changes entailed by the penetration of technology cannot be confined to the internal market. To achieve maximum productivity, it is essential that production should become specialized and grow to a suitable scale. Truths as well known as these have been

deprived of much of their meaning in Latin American development. The outdated mould of international trade has been preserved, in which every Latin American country focused its attention on the industrial centres and little reciprocal trade was carried on. Industry has thus developed inwards, neglecting opportunities for developing new exports, while agriculture has also tended to withdraw into itself, except in the case of most -- but not all -- traditional export commodities. Accordingly, the /Latin American/ common market too is a sine qua non of technical progress, and the long and arduous advance towards this objective has already begun.

The problems of economic development are actually problems of transition: the transition of the Latin American countries to higher levels of production technology in which the entire labour force will have the opportunity to achieve levels of productivity approximating those in the more advanced countries. Hence, the changes cannot be limited to the economy. They have to embrace the individual himself and endow him with the necessary skills to manage and organize the new production techniques.

Economic development therefore calls for a conscious and resolute effort to influence the forces of the economy so as to bring about all the required structural changes in a systematic and far-sighted manner. This is to a large extent the duty of the State which thereby assumes new and difficult responsibilities. Generally, in the Latin American countries, the State is in no position to take on such responsibilities; no economic development policy can, however, be effectively formulated or executed unless the State develops its capacity to do so.

Significant Changes in the Policy of International Co-operation

The new turn which the very idea of international co-operation is now taking is of decisive importance for development policy. When international finance contributed to the exploitation of peripheral resources only with a view to promoting the development of the centres, the unilateral penetration of technology into the primary producing countries was fully compatible with the maintenance of traditional structures. Indeed, the stability of such structures was conducive to the unilateral expansion of exports whatever the degree of political instability on the surface. International co-operation now tends to pursue a very different aim: to help the developing countries to increase their own rate of growth and correct the substantial disparities in income distribution in order to improve the standard of living of the broad masses. Such bold aims cannot be achieved without the transformation of the existing structures.

International co-operation is thus taking on a new meaning consistent with the popular dimensions which economic development policy

is assuming to an increasing degree -- popular dimensions not only by virtue of the nature and scale of the aims pursued but also because of the new responsibilities which this co-operation involves.

Basically, the most important policy problem as regards development consists in mastering the art of achieving and constantly maintaining an adequate rate of investment financed from national savings. Savings must be increased at the expense of present consumption by the affluent groups and of increments in popular consumption, as per capita income rises. The stronger the determination to restrain such increments in popular consumption, the more necessary it will be to have recourse to measures of compulsory saving; and the wider the use made of compulsory saving, the more serious the danger of encroaching upon principles which are deeply rooted in the Latin American countries, irrespective of their political vicissitudes.

Hence the part -- and it may well be a decisive one -- to be played by international resources is to contribute to the rapid growth of per capita income, so that increased saving does not seriously jeopardize the chances of expanding popular consumption, since apart from its political effects, this might considerably weaken the incentive to raise productivity.

A policy of co-operation, however, would not alone suffice to cure Latin America's economic and social ills. If it consisted merely in sporadic bouts of action, dictated by the circumstances of the moment, it would be no more than a palliative. Nor could the most determined policy of structural reform forge ahead untrammelled by difficulties involving the institutional system itself, if international co-operation failed to fulfill the promise of recent events as regards its breadth of scope, and the course to be pursued.

Foreign and Domestic Private Enterprise

Foreign private capital has an important part to play in all this; but the question should be approached in the light of a criterion different from certain nineteenth-century concepts whose influence is felt even today. Foreign private capital, besides making its immediate productive contribution, must be a powerful instrument for the diffusion of technology; that is, it must help to ensure that the latter is assimilated both by the technicians and by the entrepreneurs of the country into which it flows, instead of remaining the exclusive prerogative of the foreign experts who introduce it. Once technology has thus been disseminated, these local entrepreneurs and technicians will be able, in the course of time, to emulate those of more highly-developed countries.

Unless an attempt is made to bring about this gradual and progressive technological levelling-up, in the broadest sense of the term, the steady advance of development will be impossible, since the patent differences in training levels and the inaccessibility of certain techniques to local personnel will breed discord. Development will be neither economically sound nor politically stable.

Herein lies the key to the solution of more than one problem, since lower standards of technology give rise to understandable inferiority complexes, whereas technological levelling-up, by strengthening the idea of equality of opportunity, will make a noteworthy contribution to the fruitful association of domestic and foreign elements in the wide field of private enterprise.

All this is of great importance for the efficacious operation of the system of private enterprise. The Latin American peoples are fundamentally endowed with a strong sense of personal initiative, which has developed to a remarkable extent where conditions have been favourable. The significance of this for development policy is profound. There is a huge private enterprise potential of which it has been impossible to take advantage because of the serious shortcomings of the educational system. The systematic training of the broad masses at all levels of technology could open up vast horizons for individual initiative by producing and promoting the social mobility of dynamic elements at present largely wasted. It will be no easy matter to tackle this problem in a continent where, in a good many cases, the countries have not yet been able to eradicate illiteracy. It also reflects a social complex which is unfavourable to economic development.

There can be no denying that herein, and in the strength of capital accumulation, are to be found two of the elements which are most important in the dynamics of other systems of development and which are reflected in high rates of growth. The deficiency of such elements in Latin America detracts from the efficacy which characterized the system of private enterprise based on the free interaction of the forces of the economy, when the capitalistic development of the more advanced countries was at its height.

There is something paradoxical in all this, since the endeavour to reproduce [in Latin America] the outworn patterns of capitalistic development [which prevailed in the advanced countries at earlier stages of their evolution] is precisely what is preventing the system of private enterprise from making the most of its potentialities [in Latin America today].

THE UNITED NATIONS CONFERENCE ON
THE APPLICATION OF SCIENCE AND TECHNOLOGY
FOR THE BENEFIT OF THE LESS DEVELOPED AREAS

Under preparation for over a year, the United Nations Conference on the Application of Science and Technology for the Benefit of the Less Developed Areas will be held in Geneva from February 4 to 20, 1963. Official delegations from more than 80 member countries of the United Nations or of its specialized agencies are attending the Conference. Professor Maneklal Sankalchand Thacker, Director-General of India's Council of Scientific and Industrial Research and Secretary to the Indian Ministry of Scientific Research and Cultural Affairs, has been named President of the Conference. Professor Carlos Chagas, Director of the Brazilian Institute of Biophysics, has been appointed Secretary-General.

In the words of the United Nations pamphlet on the Conference, Techniques for Tomorrow's World:

"The Conference, in a way that has no exact precedent, will bring together the scientific means and the political intention which expressed itself in the unanimous endorsement of the Development Decade. Its discussions will be a kind of stocktaking of the progress achieved in science and technology, on the one hand, and in the planning for development, on the other, and will suggest how the two can march together.

"An enormous amount of new knowledge and fresh experience has been accumulated, at great cost, over the past ten or fifteen years. This uncommon knowledge is supposed to be common property, available to inquirers everywhere. In fact, practical wisdom is in danger of being drowned by this cataract of information. Even the specialists find it difficult to keep abreast of the advances made by their colleagues in their own or closely related fields. Some three million original scientific papers are published

each year in scientific or technical journals throughout the world. If the scientists themselves find it difficult to cope with them, how can officials responsible for planning economic and social development be aware of the latest advances or estimate their possible usefulness in solving problems?

"While the spectacular advances may derive from the heavily endowed researches and developments in the highly advanced countries, every country should have something of value to contribute to this Conference. This is 'mutual aid.'

"In this stocktaking Conference, in which the scientists and technologists will be offering, and sharing, their achievements, there will be opportunities for reassessment of values. The Conference will enable views to be exchanged for using techniques already evolved and for finding new ones for which a practical need exists. It is hoped, and believed, that it will stimulate inventive genius, not only in the developed areas but in the less developed, to provide the answers to the problems of the world as a whole."

The sessions are divided into 12 panels dealing with natural resources; human resources; agriculture; industrial development; transport; health and nutrition; social problems of development and urbanization; organization, planning and programming for economic development; organization and planning of scientific and technological policies; international co-operation and problems of transfer and adaptation; training of scientific and technical personnel; and communications. Two types of meetings are scheduled: General Sessions -- one for each of the above 12 subject areas -- at which the main topics will be introduced and discussed; and Specialized Sessions, at which experts in each field will discuss in depth the various specific items of the agenda.

Over 1,800 papers have been contributed by experts and submitted by member countries. These papers will be distributed to the participants. The papers for the General Sessions will be translated into English, French, Spanish and Russian -- the official Conference languages. The papers for the Specialized Sessions will be available in the language in which they were written, but with summaries prepared by the authors translated into the official Conference languages. It is hoped that it will be possible after the Conference to publish the Proceedings of the Conference and highlights of the papers.

To make more detailed information readily available to delegates, many participating nations are contributing technical libraries of books on topics related to the subject matter under discussion. A library of about 1,000 items has been specially compiled by the United States. The collection, to be displayed at the Technical Library of

the Conference, will be presented ultimately to the Dag Hammarskjold Memorial Library of the United Nations in New York.

In addition, as a special presentation for the Conference, the United States Agency for International Development is publishing in separate paperback volumes the papers prepared for each of the 12 sessions by U.S. physical and social scientists. All national delegations at the Conference will receive a set of these books, and additional sets will be available for limited distribution after the conclusion of the Conference through the U.S. AID Missions in developing countries.

Films provided by many nations on scientific, technological, social and economic subjects of interest to developing countries will also be shown during the Conference.

A SIMPLE EXPLANATION OF THE STAGES OF DEVELOPMENT PLANNING

Jan Tinbergen

[Dr. Jan. Tinbergen of the Netherlands, one of the world's leading authorities on techniques of development planning, read this paper at the International Congress on Economic Development of the International Economic Association held in Vienna in September 1962. In it, Dr. Tinbergen describes in simplified and non-mathematical terms a method of applying in less developed countries some of the mathematical techniques of economic decision-making which he and others have been evolving in recent years. Dr. Tinbergen's paper enables readers who are not trained in econometrics to understand the main essentials of these new techniques of development planning.]

This is a reprint of the paper.

In this paper, we propose to describe in simple terms the main stages, or steps, in the construction of a development plan. Together they are a complete set of activities to arrive at such a plan. They do not represent the most sophisticated methods known to the author but rather the most practical ones. The resulting method of planning is one of successive approximations and not a simultaneous solution of the complete set of interrelated problems which a plan must solve.

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Each of the following sections may be considered a phase or a stage of the process. It is in the nature of successive approximations that some of the phases must be repeated if the assumptions used are disqualified by later findings. Some of the data to be used may themselves be the outcome of pieces of "partial research" which can be undertaken independently from the succession of phases.

As a rule, development plans will be based on the assumption that prices do not change. In some cases this may not be a permissible simplification; something will be said about it in section 5.

1. Macro-economic Estimates.

To begin with, estimates are made of the most desirable time path of total national product or income y_t, total savings s_t and total investment j_t. We assume that these figures are known for a base year t=0. The difference between j_t and s_t represents net foreign aid f_t; we assume that it is known for the planning period. The essence of our problem consists of finding the optimum level of s_t or the optimum level of the savings ratio $\sigma_t = \frac{s_t}{y_t}$. Both may vary over time. The optimum path must be such that at no moment is it desirable to save more or to save less. In order to judge this we must

(i) know its consequences, and
(ii) have a yardstick to evaluate these consequences.

The consequences of increased savings are a permanently larger volume of capital K_t, resulting in a permanently larger volume of production. It is doubtful by how much future production will be raised if 1 per cent more of national income is saved in any given year. The simplest theory so far proposed is the constant capital-output ratio. This theory maintains that each addition to the capital stock leads to a proportional addition to national product. The proportionality factor is about 3 or 4 (if a time unit of a year is used) for most countries. For countries using considerable amounts of foreign capital, the capital-output ratio may be considerably higher than otherwise would have been the case: the net product added to the national product will be lower than the product obtained from an investment by the amount of interest to be paid to foreign investors. More refined theories are those using production functions. A well-known example is the Cobb-Douglas function. It shows less than proportional increases in production: a 1 per cent increase in capital works out only to a $\frac{1}{4}$ per cent increase in production.

The wide divergence between the results of these two theories may be interpreted as follows. In the constant capital-output ratio, the tacit assumption is made that technical and organization progress, as well as education, develop in proportion to the rise in capital. If this assumption is kept in mind during the further elaboration of the plan, the use

of constant capital-output ratios can be accepted. This means that education and technical progress etc. are planned in appropriate proportions.

A simple example may show the practical use of the assumptions just discussed. Let the capital-output ratio be 3 years and the savings and investment ratios in the base year 8 and 12 per cent of national income, implying foreign aid to the extent of 4 per cent. Let it be expected that foreign aid remains at this level. The rate of increase in income, according to our assumptions, will be 4 per cent ($\frac{12}{3}$) in the beginning. If the savings ratio were raised to 11 per cent, income would rise by 5 per cent annually; but in the first year consumption would have to fall by 3 per cent (11 minus 8). Similarly, more alternatives can be calculated, as indicated in the following table (expressed in per cent of national income):

Characteristics of Alternative Paths of Growth

Rate of Savings	Annual Rise in Income	Initial Fall in Consumption
8	4	0
11	5	3
14	6	6

In order to make a choice, the government must evaluate the consequences indicated above. It is the author's contention that economic science is not yet able to guide governments in this choice. Insufficient knowledge is available about the preferences of the population; moreover, the government as well as parliament may wish to deviate deliberately from these preferences if they consider the average citizen less farsighted than seems to be in his own long-term interest.

We, therefore, assume that a choice is made by the government and that, as a consequence, the future development of investment, consumption and income is given.

Our example is oversimplified in that it suggests a constant savings ratio and a constant rate of increase in income over time. The planning agency may make estimates with varying rates. In all probability, the rate of increase in income will not be forthcoming immediately, since investments require time. If the gestation period is three years, the increases in income corresponding with higher savings in year 1 will only show up from year 4 on. This feature can be introduced fairly easily into our estimates.

2. Sector Planning.

The next set of problems to be considered refers to the prospective development of demand in a number of sectors. First of all the sectors must be defined. Their number should not be too large; about twenty may be a good figure. The sectors should be as homogeneous as possible and it is clear that their choice depends on the structure of the country. Some sectors may be chosen because of their possible future importance. One sector may be non-competing imports. Once the sectors have been chosen, all data should be subdivided accordingly.

We start by estimating future demand for finished goods; these may be consumer, investment or export goods.

Consumer demand is estimated from the planned development of income and from expected population figures. Average income per head can be estimated and knowledge of Engel curves [the relationship between per capita income and expenditures for particular commodities] will enable us to estimate average demand per head for individual commodities or groups of them. Multiplying by population, total demand for these groups of commodities can be obtained. A more refined approach consists of using the income distribution. In this case, we must not only know the income distribution in the base year, but also the changes to be expected in it. One possibility is to assume that all income intervals will expand proportionately to average income. The method of estimating average demand for a given group of commodities can now be used for each income bracket. Thus, a more precise estimate of total demand is possible. For commodities showing a non-linear Engel curve [i.e. for which expenditures do not change by the same percentages as changes in incomes] this estimate is better. For commodities with a linear Engel curve [i.e. for which expenditures change by the same percentages as changes in incomes] the previous method is just as good.

If no family budget statistics are available for the country concerned, figures for comparable countries may be used. In addition to income, other factors will sometimes influence demand. In some cases, trends may have to be added representing changes in tastes or technological improvements.

Demand for investment goods was already estimated as one figure (for each year) in the macro-economic stage. It can be subdivided into demand for, say, buildings, for equipment, and for increases in stocks, if we have some initial figures and assume proportional increases. We will discuss a second (better) approximation below.

Export demand may be estimated with the aid of the principles used for estimating consumer demand. Incomes must now be incomes of countries absorbing exports. Since export commodities will not as a rule

be finished consumer goods, the relationship between income and demand must be found from other sources than family budget figures.

Having estimated the demand for finished goods, we can now estimate the necessary development of production of intermediate goods and raw materials, as far as specified by our sector definitions: they are supposed to be outputs of some sector. Their production is estimated with the aid of input-output coefficients. Demand for finished goods is considered the "final bill of goods" and the result of the operation will be the production programme needed, with the existing structure, to provide for this final bill of goods. It is not certain that the existing structure should be maintained. It may be desirable to develop more rapidly some industries showing comparative advantages; and to develop less rapidly some industries showing comparative disadvantages. For the time being it is assumed that the existing pattern was chosen in line with comparative advantages. In the project appraisal phase, the pattern will be checked and a change may be suggested by it.

The sector-wise production programme derived in this way may now be used to estimate a second approximation of the investment programme, based on sectoral investment programmes. In order to carry this out, we must know, for each sector, the capital-output ratio and the gestation period characteristic for it. The desired increase in production in all sectors can then be translated into an investment programme. This will not, as a general rule, coincide with the one calculated before. In order for it to coincide, the average capital-output ratio and the average gestation period used in the first approximation would have to be equal to the properly weighted averages of the sectoral capital-output ratios and gestation periods. Proper weights are those corresponding with the relative increases in production of the various sectors.

Among the sectors considered, we may also include educational and other social activities. This enables us to integrate into the plan a programme for training the necessary manpower of all levels. The necessary inputs are buildings and further equipment, as well as teachers -- themselves an output of educational institutions. One of the important characteristics of the educational sectors is the long duration of the process. It may well be, therefore, that education becomes a bottleneck to the development process, unless imports of trained manpower are considered possible. The necessary imports can then be estimated.

As a rule, the outcome of the sector estimates will constitute a check on the figures estimated in the macro phase. It will be necessary to repeat the calculations of both the macro and the sector phases whenever considerable discrepancies occur. This may seem to be an inefficient procedure but it is my belief that it is not. In some simplified cases I think it can be proved that this "planning in stages" is an efficient approach.

Among the sectors, a number will be producing "national goods," that is, goods which cannot be exported or imported. Important examples are energy, inland transportation, building, retail and wholesale trade, and a number of services. The production estimates obtained for these sectors can be considered final. Whatever changes in structure will be considered later must be changes in "international sectors," producing goods which can be imported or exported. Such switches are not possible in national sectors.

There may even be scope in introducing the concept of "regional sectors," producing goods which cannot be imported into or exported from the regions where they are needed. As soon as a plan has to be specified for regions -- meant here parts of a nation -- this concept becomes relevant. It depends on the aims of economic development policies what use can be made of the concept. If these aims imply the fixation, beforehand, of income aims for the various regions, the necessary production of regional goods can be estimated directly, before even the distribution of interregional sectors over the regions is fixed. It is true that this is an approximation only; strictly speaking the need for regional products may depend on the industry mix of the region. As a first approximation, however, this need may be assumed to depend on total income (or production) only.

3. Project Appraisal.

The heart of development programming consists of the appraisal of individual projects and the selection of those to be included in the investment programmes. The bulk of the work involved is of a technical character: the preparation of figures describing the inputs and outputs of each project, both during the investment period and during the operation period. In principle these figures must describe all the "relevant" features -- that is, the contributions made to the aims of development policy and the use made of the country's scarce resources. Since the main aims usually are economic ones, the economic aspects of the projects usually rank high; but several extra-economic aspects are also important, such as the project's contribution to employment, to income distribution among groups of the population and among regions, to education, to health, and to the cultural level of the country. Some of these aspects cannot be measured or estimated and may be judged intuitively only. The methods of appraisal to be used have been developed mostly by economists, but their applicability is much more general and it is an error to think that they are imposing economic criteria on extra-economic aspects. They are the only logical way of solving a problem of choice, wherever it comes up. Of course, they may be subject to improvement. A prerequisite of making a development plan is the existence of a sufficient stock of projects, in the public as well as in the private sector, sufficiently detailed to be carried out when

necessary The preparation of such a stock is an integral part of the total task of planning.

The first question to be dealt with is that of the most appropriate "unit" or "building block" to be used. Although we suggested that it is the single project in the practical sense of that word, we think it is better to consider as the unit of appraisal something more complex, expressing the necessary complementarities involved. Our building blocks of the investment programmes to be selected consist of one project in an international sector plus a set of complementary investments in the national sectors. An example will clarify matters.

Let the project in the international sector be a weaving factory. For its operation, this factory will need energy, transportation, building, and some services which must be available and which cannot be imported. Productive capacity in these national sectors must be expanded simultaneously with the creation of the weaving unit. We will call these additions to capacity the complementary set of investments in national sectors. Its estimation will be discussed below. Before doing so, we must emphasize that this complementarity does not exist with regard to any inputs needed from international sectors; these can always be imported. It is not true, for example, that the establishment of a weaving unit also requires the establishment of a spinning factory; the necessary yarn may be imported. The possible international-sector investments should, therefore, all be considered separately in order to find out which of them shows comparative advantages and which does not. But, each of them should be combined with the complementary set of investments in national sectors.

The next question is the criterion to be used. Many criteria have been proposed by the many writers on the subject. Practically all of them can be brought under the general formula of a fraction. The numerator of this fraction expresses the value of the contributions to the aims of national development policy. The denominator expresses the value of the scarce factors used. It is customary to include in the denominator only the value of the factors used during the investment period and not those during the operation period. The latter will then be brought in as negative contributions in the numerator. It would be possible to put them into the denominator, but we will stick to the customary method here.

The simplest case conceivable shows only one term in both the numerator and the denominator; for instance, the contribution to national income in the former and the capital invested in the latter. This is correct if the only aim of development policy is raising the national income and the only scarce factor is capital. If there is another aim, for instance, to increase employment, the numerator should be the "value" sum of the two aims. This presupposes that we can attribute

relative prices to the aims. These prices may be obtained from interviews with policy-makers. In principle they can also be considered as marginal (social) utilities of the aim variables. From the economist's point of view, they are autonomous or exogenous; this illustrates the acceptance, by the economist, of extra-economic elements in policy aims.

If there are more than one scarce factor, a similar problem turns up. Alongside capital, such factors as foreign exchange or trained labour may also be scarce. Their total value in the denominator can only be calculated if we have prices. However, these prices cannot be considered autonomous. They must be such as to equilibrate demand and supply. If the markets considered are in equilibrium, the observed prices (market prices) may be used. If the markets are not in equilibrium, fictitious prices must be used, known as accounting prices or shadow prices. Under some circumstances these prices can be estimated fairly accurately. The price of an imported input which is protected by an import duty should be taken equal to the world market price. If all the investment projects and the factors needed for them are known, the shadow prices can be found by trial and error methods aimed at:

(i) using all of the available scarce factors, and
(ii) maximizing the contribution to the aims.

In other cases, only crude estimates of shadow prices can be made. There are strong arguments to apply a low shadow price for unskilled labour.

Shadow prices for factors may also have to be used in the estimation of the contribution to national income of a project. If among the aims balance-of-payments equilibrium is chosen, the price to be used for a given improvement in the balance of payments may be taken equal to the shadow price for foreign exchange. Here, the price would not be autonomous -- unless this aim were considered to have an extra-economic value apart from its economic significance.

Both the contributions to the aims and to the scarce factors used should be estimated for a future period, in principle the period of the project's lifetime. This implies that the quantities and the prices used need not be equal to those prevailing at the moment of appraisal. The quantities of inputs may diminish as a consequence of a learning process. The prices may change as a consequence of changed scarcity conditions.

On the list of projects from which to choose, we may not only have alternative projects, but also alternative versions of what is essentially the same project. These alternative versions may differ in the technologies used either for the operation phase or for the investment phase. The different techniques may be characterized by their capital

intensities; that is, the quantities of capital used per man employed. In some production processes, considerable ranges of variation for capital intensity exist, and a proper choice may be important especially if heavy weight is given to employment as an objective. The choice just indicated may sometimes be made as a separate "partial" study, if it is likely to depend only slightly on the precise outcome of the appraisal of other projects.

One uses the criterion by selecting the projects yielding the highest values of it, except for some forms of regional policy to be discussed in the next section. This raises the question where to stop. As a rule, the volume of investment will be the figure determining the frontier between projects included in the programme and projects not included. A problem arises, however, when the marginal project chosen in this way makes a negative contribution to the aims. A simple example is presented by the case in which a negative contribution to national income would be made. Such a situation indicates that there is something wrong with the general economic situation of the country considered; in a general way, it indicates that incomes paid are higher than "the country can afford." Such a conclusion can only be drawn after a sufficiently large number of projects has been traced and appraised. The conclusion is of considerable importance to the development policy of the country.

4. Regional Programmes.

Sometimes, not only an investment programme for the country at large is required, but also programmes for the geographical subdivisions of the country -- called "regions." This introduces a new dimension into the problems: that of distance and location. In its full consequences, this new dimension will make the problems so much more complicated that we cannot hope to solve them in a precise way. The necessary data, as well as the necessary theories, are lacking. In this essay, only the simplest devices will be discussed which must be introduced in order to arrive at regional programmes consistent with regard to some main criteria. Similarly, we must also now know the aims of the regional development policy in addition to those of the national plan as a whole. Usually, if we speak of a regional policy, some extra-economic aims will be in the minds of the policy-makers. Well-known examples of such aims are the reduction in the differences in income per head or unemployment between the regions. This implies that more investments will have to be made in regions showing low incomes or high unemployment, even if the most attractive projects from the national point of view are not to be found in those regions.

The simplest way in which we can now proceed is the following. We make a distinction between "shiftable" and "non-shiftable" projects. The former can be carried out in several, if not all, regions without

changing their contribution to national aims. The latter can only be carried out in one region (or a few regions). Each project in an international industry (with the complementary sets of investments in national industries) must now be given a set of "numbers" indicating the regions in which this project or parts of it can be carried out.

The selection of projects for inclusion in the development programme will now be different from what it was in section 3 above. Instead of taking first what from a national point of view was the "best" project, then the second best, and so on, we now select from the projects carrying the number of the region most in need of development. The first project to be picked now will be the best among those carrying the number of the particular region. The second project will be the second best again among the projects carrying that same number, and so on. When, as a consequence of the projects selected, the region considered has been brought to the level of the next poorest region, selection will then be from projects situated in both regions. When both have been lifted to the level of the next poorest (third) region, we go on taking in projects of the three regions -- in proportions keeping them at the same level. In this way, we go on until we have fully used the investment funds available. It will be understood that a large number of variations are conceivable with regard to the criteria used for the needs of the regions, and the degree to which these needs have to be taken into account.

The project selection described in the preceding and the present sections must be considered as a correction of the sector estimates discussed in section 2. Sectors showing comparative advantages in production costs in the sense of the theory of international trade will appear to have been expanded more than sectors showing comparative disadvantages. Some of the calculations based on the sector approach -- for example, of the needs for education -- will have to be revised accordingly. The same applies to the refined calculation of investments, including their timing. This again illustrates the trial-and-error character of our method. Strictly speaking, trial-and-error methods are only correct when they lead to a converging series of estimates. This is not necessarily always true. Additional theoretical research will be needed to show the character of the series of estimates. Sometimes a choice exists between different methods of adaptation, some of which are rapidly converging. These may be useful if the total amount of work has to be kept within reasonable limits, but they are not always the best methods from the economy's point of view.

5. Assumption about Prices.

It was observed at the beginning that prices are as a rule supposed to remain constant. It may be said to be the very aim of planning to maintain equilibrium and hence to avoid the necessity of changing prices.

There are cases where this assumption is not permitted. Plans may then have to be based on changes in prices. This applies, first of all, to external changes -- that is, changes in world market prices as a consequence of external developments. These must be estimated as accurately as possible from pure forecasts, as distinct from plans. Changes in prices may also be necessary as a consequence of some features of the plan. This may be so if exports are increased of a product in which the country has comparative advantages and serves a considerable portion of the world market. The price change must then be functionally related to the rise in exports with the aid of a world demand function. As a consequence of these price changes, national income will also be affected and all demand functions depending on it. It is not too difficult to introduce such changes into the formulae of our procedures.

MATHEMATICAL MODELS OF ECONOMIC GROWTH

Jan Tinbergen and Hendricus C. Bos

[New York, McGraw-Hill Book Company, Inc., 1962, viii and 131 pp.]

This book outlines a collection of formal models which can be used by the development planner. To understand most of these models, the reader needs some knowledge of calculus. The purpose of the book is to explain a series of successively more complex models allowing progressively for: (1) several factors of production and permitting substitution between factors; (2) several productive sectors; (3) time lags between investment and increases in output; and (4) introducing the regions within the country explicitly. For the most part, prices are considered constant and the models describe economies which follow a balanced growth pattern. For each model, the instrument and objective variables are stated. It is also explained whether the model is "closed" and produces only one development path, or whether there are several paths of development and some criterion must be used by the political authority to choose the best one.

Tinbergen and Bos emphasize that planning requires explicit statement of the objectives of development policy, and that the cost of the policy should be made clear to the political authority. Similar importance is attached to understanding the structural relations of the economy so as to answer such questions as: what new productive processes are available; what are the time periods between the start of investment and the beginning of output from this investment for different processes of production; how does consumption change as income increases; what are the sources of saving; and which variables are to be utilized to achieve the plan objectives?

PRINCIPLES OF MANPOWER PLANNING

Frederick H. Harbison

[From "Human Resources Development Planning in Modernising Economies"; International Labour Review, International Labour Office, Geneva, Vol. LXXXV, No. 5, May 1962, pp. 435-458.]

These are excerpts from the article.

Most modernising economies are confronted simultaneously with two persistent, yet seemingly diverse, manpower problems: the shortage of persons with critical skills in the modernising sector and surplus labour in both the modernising and traditional sectors. Thus, the strategy of human resources development is concerned with the twofold objective of building skills and providing productive employment for unutilised or underutilised manpower.

The shortages and surplus of human resources, however, are not separate and distinct problems; they are very intimately related. Both have their roots in the changes which are inherent in the development process. Both are related in part to education. Both are aggravated as the tempo of modernisation is quickened. And, paradoxically, the shortage of persons with critical skills is one of the contributing causes of the surplus of people without jobs. Although the manpower problems of no two countries are exactly alike, there are some shortages and surpluses which appear to be universal in modernising societies.

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Manpower Shortages

The manpower shortages of modernising countries are quite easy to identify, and fall into several categories:

(1) In all modernising countries, there is likely to be a shortage of highly educated professional manpower such as, for example, scientists, agronomists, veterinarians, engineers, and doctors. Such persons, however, usually prefer to live in the major cities rather than in the rural areas, where in many cases their services are most urgently needed. Thus, their shortage is magnified by their relative immobility. And, ironically, their skills are seldom used effectively. In West Africa and also in many Asian and Latin American countries, for example, graduate engineers may be found managing the routine operation of an electric power sub-station or doing the work of draughtsmen. Doctors may spend long hours making the most routine medical tests.

(2) The shortage of technicians, nurses, agricultural assistants, technical supervisors, and other sub-professional personnel is generally even more critical than the shortage of fully qualified professionals. For this there are several explanations. First, the modernising countries usually fail to recognise that the requirements for this category of manpower exceed by many times those for senior professional personnel. Second, the few persons who are qualified to enter a technical institute may also be qualified to enter a university, and they prefer the latter because of the higher status and pay which are accorded the holder of a university degree. Finally, there are often fewer places available in institutions providing intermediate training than in the universities.

(3) The shortage of top-level managerial and administrative personnel, in both the private and public sectors, is almost universal, as is the dearth of persons with entrepreneurial talents.

(4) Teachers are almost always in short supply, and their turnover is high because they tend to leave the teaching profession if and when more attractive jobs become available in government, politics, or private enterprise. The scarcity is generally most serious in secondary education, and particularly acute in the fields of science and mathematics. This shortage of competent teachers is a "master bottleneck" which retards the entire process of human resources development.

(5) In most modernising countries there are also shortages of craftsmen of all kinds as well as senior clerical personnel such as bookkeepers, secretaries, stenographers, and business machine operators.

(6) Finally, there are usually in addition several other miscellaneous categories of personnel in short supply, such as, for example, radio and television specialists, airplane pilots, accountants, economists, and statisticians.

/With respect to shortages of such high-level manpower,/ we may make two tentative generalisations:

First, the rate of accumulation of strategic human capital must always exceed the rate of increase in the labour force as a whole. In most countries, for example, the rate of increase in scientific and engineering personnel may need to be at least three times that of the labour force. Sub-professional personnel may have to increase even more rapidly. Clerical personnel and craftsmen may have to increase at least twice as fast as the labour force, and top managerial and administrative personnel should normally increase at a comparable rate.

Second, in most cases, the rate of increase in human capital will need to exceed the rate of economic growth. In newly developing countries which already are faced with critical shortages of highly skilled persons, the ratio of the annual increase in high-level manpower to the annual increase in national income may need to be as high as three to one, or even higher in those cases where expatriates are to be replaced by citizens of the developing countries.

Labour Surpluses

The overabundance of labour is in most countries as serious a problem as the shortage of skills. Its more common manifestations are the following:

(1) In nearly all countries the supply of unskilled and untrained manpower in the urban areas exceeds the available employment opportunities. The reasons are not difficult to find. First, large urban populations are likely to build up prior to, rather than as a consequence of, the expansion of industrial employment. Second, as industrialisation gains momentum, the productivity of factory labour tends to rise sharply, and this limits the expansion of demand for general industrial labour. Modern industrialisation may even displace labour from cottage and handicraft industries faster than it is absorbed in newly created factories. Third, the government service is able to provide legitimate employment for relatively few people And, finally, unless development is extremely rapid, trade, commerce, and other services simply do not absorb those who cannot find jobs in other activities. But despite relatively limited employment opportunities and overcrowded conditions, the modernisation process impels people to migrate from the rural areas to the cities. And, as progress is made toward universal primary education, nearly every modernising country is faced with the problem of mounting unemployment of primary school leavers.

(2) In overpopulated countries such as, for example, Egypt or India, the rural areas are also overcrowded, resulting in widespread under-employment and disguised unemployment of human resources. Indeed,

in many countries it is evident that total agricultural output could be increased if fewer people were living on the land and the size of agricultural units was increased. Thus, surplus labour in rural areas in most cases is no asset and in some cases is definitely a liability for increasing agricultural output.

(3) The "unemployed intellectual" constitutes an entirely different kind of surplus. In many countries, for example, it is reported that there are too many lawyers or too many graduates of the arts and literature faculties. And there may be instances also of unemployed or under-employed engineers, scientists, economists, and even agronomists. The unused intellectual, however, is unemployed only because he is unwilling to accept work which he considers beneath his status or educational level. A university education creates very high employment expectations. In some countries, a university degree may be looked upon almost as a guarantee of a soft and secure job in the government service, and in most it is assumed to be a membership card in the elite class. But, even in rapidly modernising countries, the purely administrative jobs in the government service become filled fairly rapidly; the demand for lawyers, for example, is certainly not as great as the demand for technically trained personnel. And in some societies where large enterprises are owned and managed by members of family dynasties, even the opportunities for professionally trained engineers and technicians may be limited, at least in the early stages of development. Rather than accept work beneath his status, or employment in remote rural areas, the university graduate, and sometimes even the secondary school leaver as well, may join the ranks of the unemployed. A sizeable quantity of unused human capital of this kind reflects a wasteful investment in human resources development and poses a serious threat to a country's social and political stability.

(4) There are other miscellaneous kinds of surplus labour. For example, the introduction of new processes and automated machinery may throw skilled labour out of work. Or secondary school leavers, who feel that they should qualify for white collar jobs, may shun manual work of any kind. And, in some countries, immigrants and refugees swell the ranks of the unemployed.

Manpower Analysis

Some labour surpluses, however, can be eliminated and others reduced substantially by a well-conceived and balanced programme of economic growth. A strategy of human resources development, therefore, must include an attack on surpluses as well as shortages. Politicians and planners need to make a systematic assessment of the human resources problems in their particular countries. Such assessment may be called "manpower analysis."

The objectives of manpower analysis are as follows: (1) the identification of the principal critical shortages of skilled manpower in each major sector of the economy, and an analysis of the reasons for such shortages; (2) the identification of surpluses, both of trained manpower as well as unskilled labour, and the reasons for such surpluses; and (3) the setting of forward targets for human resources development based upon reasonable expectations of growth. Such forward targets are best determined by a careful examination and comparison, sector by sector, of the utilisation of manpower in a number of countries which are somewhat more advanced politically, socially and economically.

Manpower analysis cannot always be based on an elaborate or exhaustive survey. It is seldom possible to calculate precisely the numbers of people needed in every occupation at some future time. But, whether statistics are available or not, the purpose of manpower analysis is to give a reasonably objective picture of a country's major human resources problems, the inter-relationships between these problems, and their causes, together with an informed guess as to probable future trends. Manpower analysis is both qualitative and quantitative, and it must be based upon wise judgment as well as upon available statistics. In countries where statistics are either unavailable or clearly unreliable, moreover, the initial manpower analysis may be frankly impressionistic.

A Manpower Planning Strategy

Once the manpower problems of a newly developing country are identified, a strategy must be developed to overcome them effectively. The essential components of such a strategy are the following: (1) the building of appropriate incentives; (2) the effective training of employed manpower; and (3) the rational development of formal education. These three elements are interdependent. Progress in one area is dependent upon progress in the other two. The country's leaders should not concentrate on only one or two of them at a time; they must plan an integrated attack on all three fronts at once.

Investments in formal education alone are not likely to solve either critical skill shortages or persistent labour surpluses in modernising societies. Investments in education are likely to contribute effectively to rapid growth only (1) if there are adequate incentives to encourage men and women to engage in the kinds of productive activity which are needed to accelerate the modernisation process; and (2) if appropriate measures are taken to shift a large part of the responsibility for training to the principal employing institutions. The building of incentives and the training of employed manpower, therefore, are necessary both as a means of economising on formal education and as a means of making the investment in it productive.

In the building of incentives, a cardinal principle is that the status and compensation attached to occupations should be related to their relative importance as measured by the high-priority needs of a developing society, and not to arbitrary levels of education, degrees, family status or political connections. This is essential for the accumulation of human capital and for its most effective utilisation. The surpluses of labour, particularly those connected with rural-urban migration and the unemployment of primary school leavers, may be reduced in part by a far-reaching programme of modernisation of agriculture and rural life as a counterpart to a programme of industrialisation. Because of rapidly increasing populations and the early emphasis on universal primary education, however, there will still be large numbers of unemployed or under-employed persons in most modernising societies.

The potentialities of fully utilising government agencies, private employers, expatriate firms and technical experts as trainers and developers of manpower, though very great indeed, are seldom exploited fully. Thus, a key element in the strategy of human resources development is to shift as much as possible the responsibility for training to the major employing institutions, and to provide the necessary technical guidance to enable these institutions to develop in-service training programmes along modern lines.

The third component of the strategy is wise judgment and prudent investment in building the system of formal education. This calls for giving priority to investment in and development of broad secondary education. It requires that the costs of universal primary education be kept as low as possible by applying new technologies which can make effective use of relatively untrained teachers and which can multiply the contribution of a very small but strategic group of highly trained professionals. Finally, in the area of higher education, the strategy stresses the need for giving priority to investment in intermediate-level training institutions and the scientific and engineering faculties of universities. But this does not mean that the production of liberally educated persons should be neglected.

It is imperative that the strategy of building and utilising human resources be an integral part of a country's national development programme. The strategy assumes that the politicians of the country are firmly committed to the goal of accelerated development, and that they have the will to do the things which are imperative for its attainment.

Some Obstacles To Be Overcome

There are, however, obstacles which lie in the path of implementation of a consistent strategy of human resources development. The most formidable, perhaps, is traditional thinking. For example, those who have experience with traditional methods of elementary education are

suspicious of new technologies which might reduce teaching costs. Most of the leaders of the underdeveloped countries are unaware of the great strides made recently in methodology of in-service training in the advanced countries. The thought of overhauling the wage and salary structure of government ministries is frightening. The idea of tampering with higher education to turn out larger proportions of sub-professional personnel is not consistent with the kind of indoctrination one may have had at Oxford, Cambridge or the Sorbonne. And the very thought that there is a strategic relationship between incentive, in-service training, and formal education is strange and difficult to grasp. Yet those who preach the revolutionary doctrine of planned, accelerated growth -- more rapid and more sweeping than anything before -- must be prepared to reject outworn concepts and employ the most modern techniques available. In their approach to development, they must be more modern in many respects than the advanced nations from which they seek aid and advice.

The governmental structure of the developing countries is another obstacle. Thinking and planning tends to be in compartments. The ministries of education deal only with formal education, and some do not even have jurisdiction over technical education. Ministries of labour are concerned with employment standards and some aspects of training skilled and semi-skilled labour. The ministries of industry, commerce, and agriculture are likely to be preoccupied with technical and financial questions. The economic development ministries or development boards, if they exist at all, are generally concerned with physical capital formation, the balance of payments, and other urgent economic questions. The traditional economic planners are likely to banish human resources development to that "no-man's land" of social welfare. Thus, no ministry or board is in a position to see the problem as a whole. Each grasps rather blindly for some programme of manpower development, and in justification makes wild claims for its indispensable role in promoting rapid growth.

Until recently, moreover, foreign technical experts have added to the confusion and fragmentation of effort in this field. Each has a particular package to sell; each normally deals with only one ministry; each with tireless zeal tries to "educate the top leadership" on the importance of a particular project. There is "competition among the givers." In the developing country, offers of help may be forthcoming from the United Nations, UNESCO, the ILO, as well as from governments, philanthropic foundations and a host of church missions and other voluntary organisations. Each has an interest or a programme which it may be pushing in particular countries, and in most cases offers assistance in a specialised field.

This "competition among givers" is desirable in many respects. It offers the developing countries a range of choice. It puts pressure on

the givers to do as good a job as possible. It gives the recipient countries a feeling that many nations and many institutions are concerned with their welfare. But there are obvious drawbacks. Aid is given in pieces without regard for broader, underlying problems. The energies of the recipient governments are consumed by a proliferation of scattered and unrelated projects. Often the best qualified local manpower is lured away to foreign countries on fellowships, study tours and other exciting ventures, leaving virtually no one at home to handle the day-to-day work of project development. And, worst of all, in some countries the politicians are tempted to use some of the givers as scapegoats by asking for "a survey of experts" as a convenient means for postponing action on a thorny problem.

Implementing Machinery

The design of a strategy calls for integrated rather than compartmentalised planning. The implementation of a strategy requires co-ordinated activity. Assuming that a strategy can be developed, what machinery is necessary for its implementation?

Since manpower problems are the concern of many ministries, the programme of human resources development should be implemented by an inter-ministerial board. In addition to members of the government, this board should normally have representation as well from the non-government employing institutions and organised labour. As a general rule, this board should report to the Head of State rather than to a particular ministry. It is essential, however, that such a board should have a secretariat. And this board and its secretariat should be integrated with whatever machinery is established for general economic development planning. Among its key functions would be the following:

(1) The assessment of human resources problems through periodic manpower analysis.

(2) The integration of human resources development strategy with other components of the country's plans of economic and political development.

(3) The promotion and stimulation of planning activity on the part of the ministries represented on the board, as well as on the part of employers' and workers' organisations.

(4) The co-ordination of the above planning activities.

(5) The determination of priorities in the strategy of human resources development, and the continuous reassessment of priorities as the programme progresses.

(6) The selection and design of research projects which may be useful for the formulation, implementation, and evaluation of the strategy of human resources development.

(7) Co-ordination and approval at the national level of all requests for external and technical assistance involving manpower and human resources development.

(8) The general review of all activity connected with human resources development, and periodic evaluation of the work of the various agencies which assume responsibility for it.

Formal machinery such as that suggested above is not difficult to establish. Its effectiveness, however, will depend upon the people who provide its leadership and the kinds of personnel recruited for its secretariat. Its success will be related also to the effective use of the right kind of foreign experts as consultants. In short, the critical element in the creation of machinery for the implementation of the strategy of human resources development is the right kind of high-level manpower.

SOCIOLOGY OF DEVELOPMENT

ON THE THEORY OF SOCIAL CHANGE: HOW ECONOMIC GROWTH BEGINS

Everett E. Hagen

[Center for International Studies,
Massachusetts Institute of Technology;
Homewood, Illinois, The Dorsey Press,
1962, xvii and 557 pp.]

[It has become commonplace to point out that development is not simply an economic process but also involves profound social and psychological changes. However, it is still quite rare for this generalization either to be translated into operational applications in specific development situations or to be substantively taken into account in the elaboration of a development theory.

In a book of major significance, Dr. Everett E. Hagen -- Professor of Economics and senior staff member at the Center for International Studies of the Massachusetts Institute of Technology -- applies himself to this latter task. By training a professional economist, and with many years of practical experience in underdeveloped countries, Dr. Hagen prepared himself for this work by six years of intensive study of the contributions made by sociology and psychology in the last two decades to understanding the process of social change.

A summary of the book prepared by the author begins on the next page.

Owing to this interdisciplinary background, Dr. Hagen's book introduces development administrators and economists to many unfamiliar sociological and psychological concepts and terms. These are not, however, arbitrary. Within their respective social sciences, they have precise analytical meanings based upon a growing body of empirical data.

Indeed, Dr. Hagen has been engaged in much the same sort of activity as the theoretical economist who constructs a mathematical model of the process of economic growth. This book is essentially an attempt to devise a model or paradigm of the process of social change which will help to illuminate the roles of social and psychological factors in starting the process of economic growth. Other sociologists and social psychologists will not necessarily agree with Dr. Hagen's selection of relevant factors nor with the particular roles he assigns to each. Nor does it follow that all the terms and conditions of his model must be present in precisely the relationships and degrees he describes before social change and economic growth occur in a traditional society. A general social theory or model of this kind does not invariably apply in every specific case. It serves rather to identify the common elements, and their interrelationships, that can be discerned amid the wide variations in the social structures and dynamics of actual traditional societies in transition, both in the past and today.

In the following pages, Dr. Hagen has, in simplified form, summarized the main outlines of his book especially for the readers of the Digest:/

Writings on economic development may be classed into those which deal with policy and those which deal with the "natural history" of development. The former suggest, often with an underpinning of economic theory, what a government should do to accelerate development. The latter attempt to explain why forces which bring about continuing technological progress and continuing rise in income have appeared in one country sooner than in another. Often they imply that policy advice will not be firmly based until we understand the natural history better.

This volume deals with the natural history of development. Specifically, it suggests why a considerable number of economic innovators -- persons with the abilities, interests, and energy needed for economic progress -- have appeared in some countries sooner than in others. It does so, not by summing up various incidental influences and forces, but by providing a general theory which seems to fit the facts of the transition from traditional techniques to continuing technological advance in various countries.

The relevance to policy is not that the analysis suggests how an increase in the number of effective innovators in a country can quickly be brought about. Unfortunately, it suggests that their emergence is apt to be a rather slow process. It may, however, provide a better understanding of certain of the reasons why technical and economic aid is sometimes ineffective. Any such increase in understanding of the problems one faces may aid one in finding ways around them. A more specific statement of possible operational relevance is presented in the concluding paragraphs of this essay.

To understand the persistence of traditional methods of production in present-day low-income societies, it is important to note that even though advanced methods have been developed long since in the West, technological progress in present low-income societies does not and cannot occur simply by imitation of Western methods.

A U.S. factory depends for its efficiency upon a network of facilities outside it: varied, dependable sources of supply of materials and components, and channels of distribution of products; rapid dependable communication; road, rail, water, and air transportation; the ready availability of repair facilities and of spare parts of controlled quality and dimensions; expert advice in science, engineering, accounting, finance, law, economics, and management; and no doubt many other factors as well. The forms of organization used by American firms are efficient not because of the discovery of universal laws of organization, but because the inter-personal relations involved are compatible with the values of American society. For example, the delegation of authority and responsibility common in U.S. factories would be objectionable in some societies, and the maintaining of labor relations on a contractual instead of a lifelong basis would be thought in some societies to be an immoral abrogation of one's responsibility to one's employees. In these different circumstances, U.S. forms of organization might not be efficient. If a U.S. factory were lifted from its technical, economic and cultural complex, set down in a low-income country, and operated precisely as it is in the United States, production in it would probably come to a halt in a month. Often the adaptations needed are major ones, and often the adaptations to personality and cultural factors are more baffling than the technical ones.

Even simple processes may need to be adapted. Thus, in a barefoot tropical society, the spade as we know it cannot be used efficiently. Pressing repeatedly on the blade will cut bare feet, no matter how tough the soles of the feet are. If a band on which the foot may press is run along the top of the blade at right angles to the blade, dirt will pack against it and the spade will not release its load. Only when someone thought of drilling a hole sidewise through the handle a few inches above the blade, and running through it a round rod on which the foot might press, did the spade become a reasonably efficient tool in tropical countries.

The moral is this: economic development in low-income countries requires creativity on the part of indigenous innovators, large and small. Quite possibly, the degree of creativity needed is as great as was required in the original industrial revolution in the West, though it is of a somewhat different nature.

To explain economic growth, one must therefore ask: Why is only a small amount of creativity channeled into technological activities in

traditional societies? (The reference here and below is to technological, managerial, and organizational creativity, not to artistic talent.) Two possible answers are that the level of creativity which characterizes the members of these societies is low, and that attitudes of individuals in them prevent creative persons who are present from finding it interesting to use their energies in technological innovation. Not merely the uninformed opinion of those Westerners who do not understand cultures different from their own but also more dispassionate investigation suggests that, in fact, both are true. The book summarized here tries to explain why these conditions tend to be true of technologically unprogressive societies, and what circumstances cause them to change.

At this point, it is relevant to note that certain other characteristics of the economically underdeveloped countries, as well as their techniques of production, have been virtually unchanging. In many present-day low-income societies, until the upheavals of the past two decades, political methods and social structure -- as well as techniques of production -- had changed little for hundreds, or in a few cases several thousands, of years. A wealthy landed group has dominated the political as well as the economic life of the country. The social and political structure has been authoritarian. Political leaders, officers of the armed forces, and the professional classes all have come from the families of the central elite group. One's position in society has been inherited; few individuals rose socially by their achievements. I shall call such societies traditional societies. Even though some aspects of traditional ways are now eroding in them, many of the traditional characteristics are still present.

By the term "elite" I shall refer to everyone in traditional societies above the peasants, menials, and craftsmen. The various grades of elite include everyone from village teachers or headmen to the country's leading families. The leaders of technical innovation, petty or grand, will predominantly be members of the elite.

Many elite individuals are prevented from using their energies effectively in economic development by their repugnance to being concerned with the grubby material aspects of life. This repugnance relates to occupying oneself with the details of running a business effectively, as well as to performing manual-technical labor -- "getting one's hands dirty." Often the repugnance is unconscious; the individuals involved would indignantly deny it, because it does not occur to them that any middle- or upper-class person anywhere would have a more favorable attitude toward engaging in such activity than they have. Why does this attitude exist?

It is deep-rooted. I would explain it as follows. Every person in any society who holds or gains privileged position in life must justify it to himself, in order to be comfortable. If he has gained

it by his abilities, justification is easy. The person who gains it by the accident of birth is forced to feel that it is due him because he is essentially superior to the simple folk. Typically, the elite individual in traditional societies feels that his innate superiority consists in being more refined than the simple folk. One evidence of his greater refinement is that he does not like the grubby attention to the material details of life which is one of the distinguishing characteristics of the simple folk. Regardless of the way in which this attitude may have developed historically, today from infancy on the elite child acquires it by perceiving the words, the attitudes, the tone of voice of his elders. By the time he is six or eight years old, it is deeply bred into his personality.

Only individuals who in some degree escape this traditional attitude (in ways suggested below) are apt to be economic innovators.

This repugnance toward manual-technical affairs is one important barrier to technological innovation. I have suggested also that the level of creativity in traditional societies is probably low. In any society, only a few persons are highly creative; the degree of creativity shades downward in other members of the society. As we shall see, creativity is largely determined by parental attitudes and the resulting childhood environment and training. Because of differences in these, the number of highly creative people in traditional societies is probably even smaller than elsewhere, and the degree of creativity in the population in general is probably also typically smaller.

One hereditary characteristic usually found in a creative individual is innate intelligence. However, the best evidence suggests no reason to assume any appreciable difference in this respect between the individuals of traditional societies and those of other societies. There are varying degrees of innate intelligence in both. Another basic characteristic in creative persons is a certain attitude toward problems. Everyone, when he faces a problem -- a new situation requiring analysis and decision -- feels two reactions: pleasure at the chance to prove his abilities, and anxiety lest he fail. A person is apt to be creative only if the response of pleasure dominates. He is drawn to problems by the anticipation of pleasure in attacking them; their challenge draws out his energies and abilities. In another type of person, which I shall call authoritarian for reasons indicated shortly, but which might equally be termed simply uncreative, the response of anxiety dominates. The individual anticipates failure. He protects himself from the feeling of anxiety by unconsciously not noticing problems. He does not see opportunities to try new methods. He finds reasons not to experiment, for in experimenting he must use his judgment, and may make a mistake.

Such a person, who feels anxiety whenever he is forced to make a decision, is apt to look outside himself for reassurance and guidance. He will find comfort in the consensus of a group (not on a majority decision opposed by a minority, for this involves a clash of judgment and the necessity of choosing between the two jugments). He will find it comfortable to rely on authority for guidance -- the authority of older men or of the appropriate person in the hierarchy of authority and status which is always found in a traditional society. He will enjoy having a position of authority himself; one reason for this is that if he must make a decision, he can give it the sanction of his authority; persons below him, if they in turn find it comfortable to rely on authority, will not question his decision, and he does not need to feel anxiety lest analysis of it would prove it to have been wrong. It is right because a person with the proper authority made it.

This analysis suggests that not all people would choose democracy if given a free choice. Democracy is the preferred form of government only if there is a goodly sprinkling of persons throughout the society who like making choices and decisions. An authoritarian system may be preferred if such persons are very few.

One reason for thinking that persons with such authoritarian personality are more numerous in traditional societies than elsewhere, and persons with innovational (i.e., creative) personality less numerous, is that this hypothesis explains many things about traditional societies which otherwise are puzzling. It explains, for example, why many persons in traditional societies not only follow traditional methods, but seem to cling almost compulsively to them, even though to an outsider trial of a new method seems so clearly to their advantage. It explains why the method of decision of local problems in so many traditional societies is by consensus of the village elders, through a long process of finding a least-common-denominator solution on which all can agree, rather than by majority vote.

It explains, too, why authoritarian social and political systems have persisted in such societies for such long periods. If one believes that people everywhere prefer democracy, it is necessary to believe that authoritarian forms of government have persisted in many societies for centuries, and in a few for several millenia with few interruptions, simply because a top elite group controlled the instruments of economic and physical power and could impose its rule on unwilling masses. This seems highly unlikely. Rule by, say, three per cent of the people may be imposed on the remaining ninety-seven per cent by force for a decade or perhaps a generation; but that an unhappy ninety-seven per cent will be unable over a much longer time to find a way to overthrow the few is improbable. If, however, we assume that people in general in the society are content with an authoritarian hierarchy not simply because they haven't known anything else but because

it has the positive virtue of preventing anxiety, then history becomes much more easily understandable.

That a hypothesis explains a number of phenomena which are otherwise puzzling is strong reason for accepting it at least tentatively. However, there is also more direct reason for believing that authoritarian personality is unusually prevalent in traditional societies. This reason lies in the existence of some evidence that childhood environment and childhood training in traditional societies are of the kinds which tend to produce such personality.

Perhaps the factor which is most important in determining whether childhood environment will be conducive to the formation of creative personality or such as to cause the formation of authoritarian personality is the opinions of the parents concerning the nature of infants and children.

Suppose that the parents take for granted that infants are organisms which, while delicate and in need of protection for a time, have great potentials; organisms which, as they unfold, will develop capacity for understanding and managing life. A mother who regards this as an axiomatic fact of life will, if she is sensible, take precautions to keep her child's explorations of the world around him from causing harm or alarm to him, but she will let him explore his world, will watch with interest and pleasure as his muscular capacities develop, his range of activity expands, and he accomplishes in endless succession the hundreds of new achievements which occur during infancy and childhood. His repeated use of his new physiological capacities, as they unfold, is from his viewpoint problem-solving -- intensely interesting problem-solving. Suppose that his venturing is successful, because his mother has taken safeguards so that he will not burn, cut, or otherwise seriously injure himself, and that his initiative does not meet repeated restraint, because she trusts his developing capacities and guides him on occasion but does not direct his every step. Then he will repeatedly feel pleasure in her pleasure; and there will be deeply built into him the pattern that initiative is rewarded, that his judgment is adequate, that solving problems is fun. If, being sensible, she does not press him to do things before his capacities develop, so that he fails, but on the other hand usually refuses to let him lapse into babyhood after he has gained capacities, and shows displeasure when he does not do things for himself, then the stimulus of displeasure when he does not show initiative will be combined with that of her pleasure when he does so. During the first year or more of his life, her attitude is the most important one in his life; after that the attitude of his father (and also that of his siblings) toward his behavior will also be important.

Suppose, alternatively, that the child's parents have built into their personalities the judgment that children are fragile organisms without much innate potential capacity to understand or manage the world. Then, during the first two years or so of life, the mother is apt to treat the child over-solicitously, and to shield him somewhat anxiously from harm. In doing so, unintentionally she also keeps the child from using his unfolding initiative. The use of initiative comes to alarm him, because it alarms her. Then, after these first few years of life, when the parents think the child is old enough to be trained, parents with the view that children are without much potential inner capacity will train the child by a continual stream of commands and instructions concerning what is good to do and not good to do, the proper relationships to them and to others, and in general how he should live. Exercise of initiative on his part frequently brings alarm and displeasure, and hence causes him anxiety. He can avoid anxiety only by passively obeying the instructions of these powerful persons so important in his life. The instructions will often seem arbitrary to him, and the repeated frustration of his initiative will create anger in him. He will repress it, but this does not mean that it disappears.

The practices and attitudes of older siblings and playmates who have been brought up under the same influences will provide models which in various ways will reinforce the same lesson.

The impact of these parental attitudes on the child may be reinforced by certain related attitudes of the parents. The existence of any child restricts the freedom of his parents, and interferes with their relations to each other. Moreover, the child exerts a will independent of theirs, and they are not always sure that they can control him. If the parents, especially the mother, are relaxed confident people, they will not be disturbed by these problems. Suppose, however, that they are somewhat anxious persons who feel that they themselves do not understand the world (as they are apt to feel if their own childhood was like that which I have just described). Then their child may repeatedly make them anxious, and unconsciously they may resent him for causing them anxiety and also interfering with their freedom. These differences in attitude will have an impact on the child through infancy and childhood, but for brevity I shall mention only the most conspicuous manifestation -- usually occurring during the fourth and fifth years of life -- which psychologists call the "period of infantile sexuality." At this age, a boy knows that he is a male, like his father, and that he will become big, like his father, and he begins to wonder whether he can successfully rival his father. Specifically, he becomes a rival of his father for his mother's attentions. If his father and mother are perceptive and understanding persons, they will accept him into their fellowship and let him gain an adequate degree of the feminine attention he needs. However, without anxiety or arbitrariness, they will teach him that he can postpone his demands when the

circumstances require it, and need not feel anxiety at the postponement. He will learn, as before, that one's initiative must be judicious, and he will also reinforce powerfully the earlier lesson that the exercise of his initiative is safe and brings pleasure.

If the father is weak and the mother is not arbitrary and somewhat rejecting, the son may gain his mother's attentions not because his parents understand his needs and meet them but because his father gives up at the boy's aggressive persistence. In this case, too, the son will learn that initiative is successful, though he will learn it with overtones of anxiety.

Suppose, however, that the parents doubt their own ability to manage problems, and, having no faith in the capacities of children, regard the boy's initiative as a danger rather than a valuable attribute. Then, they will be disturbed by the boy's emerging rivalry with his father during this period, will resent the boy's encroachment, and will "put the boy in his place." The experience will reinforce the anxiety and alarm that the boy felt earlier at the exercise of initiative. It will also reinforce the anger that the boy felt earlier at his parents' arbitrary restrictions and, since he cannot vent his anger at his parents, there is apt to build up in him an unformed desire to exercise arbitrary authority himself, and lord it over someone under him, later in life.

In these ways, creative or authoritarian personality is formed. There are many other aspects to the process, and many other aspects of authoritarian and creative personalities, which cannot be discussed here. This brief discussion will, I hope, give the general flavor of both the personality types and the process which forms them.

I think that the reader may already have realized that the parental attitudes which tend to create authoritarian personality in the children are themselves components of authoritarian personality in the parents. That is, persons in whom authoritarian personality was created by the circumstances of their childhoods are apt to have such a view of life that they will in turn create an environment which will cause authoritarian personalities to appear in their children. The type, like most other personality types, tends to be self-perpetuating.

It is of great importance, then, that the scattered evidence which is available suggests that precisely the sort of childhood environment and training sketched above as conducive to the emergence of authoritarian personality is the sort prevalent in traditional societies. Fairly intensive sketches of childhood environment in Burma by Hazel Hitson and in Java by Hildred Geertz, and more fragmentary sketches relating to many Latin societies, indicate that in all of these cases childhood environment is precisely of this type. These sketches refer

primarily to the simple folk, but there is some empirical evidence to suggest that they are true of personality and childhood environment among the elite as well.

And there is even more convincing evidence that various of the conspicuous characteristics of authoritarian personality are present in many traditional societies in Latin America and Asia. Though our knowledge concerning African countries is more limited, they are probably present in those countries as well. Hence, it seems likely that a low level of creativity is also characteristic of such societies.

Presumably this personality type developed initially because the everyday phenomena of the physical world were bewildering to unscientific man. Convinced of his inability to fathom the world, man began to protect his children jealously when they were infants and then train them minutely in the way in which they should behave to be safe. And so authoritarian personality appeared and perpetuated itself. Repugnance to concerning oneself with the business aspects of life and with manual-technical labor also appeared among the elite, in the way sketched earlier in this essay, and tended to perpetuate itself.

How, then, did social change ever occur, and technological progress and economic development ever begin?

Study of a number of countries in which there has occurred a transition from a traditional society to continuing economic development suggests that an important factor initiating change was some historical shift which caused some group or groups of the lesser elite, who previously had had a respected and valued place in the social hierarchy, to feel that they no longer were respected and valued. This derogation in some societies consisted of explicit indication of contempt for the functions or position of the lesser elite, in others of behavior by a new higher elite which seemed immoral, unmanly, or irreligious to the groups below them, and thus indicated contempt for the moral standards of the lesser elite.

I shall omit the example of England, which is complex and difficult to mention briefly, and shall refer only to highlights of three other examples. In the 1650's the Tsar of Russia and the Patriarch of Moscow, to attain diplomatic ends by adopting Greek religious practices, ordered certain changes in the ritual of the Orthodox church which the faithful felt to be heretical and to endanger their souls. There followed conflict and persecution, in waves of varying severity, even down to 1900. The Old Believers, who were the victims of this withdrawal of respect for their status in the society, were prominent in economic development in Russia in the nineteenth century. Concerning the 20th I have no information.

In Japan, the feudal group known as the Tokugawa, who gained national power in 1600, imposed a peace which deprived the samurai of their traditional function; imposed rigid distinctions among social classes which had the effect of relegating the so-called "wealthy peasants," descendants of the lesser elite, to the rank of peasant; and to some extent demeaned other feudal groups, the so-called outer clans. It was the lesser samurai and wealthy peasants, apparently especially of the outer clans, who were the innovators in Japan's industrial revolution.

In Colombia, in the 1530's the Spanish settled on a high plateau around Bogotá and in the valleys around Cali and Medellín. Through historical developments I shall not sketch, during the next two centuries, the settlers of the other two areas came to look down on those in Antioquia, the valley around Medellín. The social friction continues to the present; and the Antioqueños have been the leaders in economic innovation out of all proportion to their numbers in the population.

I shall call such events "withdrawal of status respect" from the group no longer accorded its old place. It is important to note that the situation is one in which a group of the elite once had full status respect, and later lost it. What are the results?

I suggest that among the adults of the first generation so affected, the reaction is anger and anxiety. Their children, however, seeing that their parents' role in life causes anxiety, do not find it a fully satisfying model. Alternative roles are in general not open to them, and so they respond by repressing somewhat within themselves their parents' values -- by ceasing to have <u>any</u> role values with the same clarity and intensity their parents did. The process, I suggest, is cumulative in the third and fourth generations, and in the second or third or fourth generation there appears pronounced "normlessness" or shiftlessness, or, in Merton's term, retreatism, as for example in American Indians on any reservation, first and second generation immgrants, colonial subjects, and also at the beginning of their transformation in the Antioqueños, the samurai, the Old Believers, as history amply attests.

There is reason to suspect that retreatism affects men more than women, because of the differences between the normal social roles of the sexes. After several generations, then, there will appear weak and somewhat shiftless men but not so weak women. As mothers, the women will probably feel some pity for their children's lot in life, and will cherish them tenderly. But reacting to the ineffectiveness of their husbands, the women will have an intense desire that their sons shall be more effective, and will respond with delight to each achievement of infancy and boyhood. During the period of infantile sexuality, the boy will win in the rivalry with his father, both because his initiative pleases his mother and because his father is weak.

Obviously, not all home environments in some generation of a group from whom status respect has been withdrawn will be like this, but it is plausible to believe that some such environment will appear occasionally, or even fairly often. Some combinations and intensities of such maternal attitudes, combined with weakness in the father, seem to have provided the environment which has been most conducive to the formation of an anxious driving type of creativity.

Where a considerable degree of creativity is inculcated, but the anxiety is great, a type of individual may appear who gives himself security by being traditional and authoritarian in most aspects of his behavior, and then dares to be bold and creative in some other aspect. Persons of this type have been important in economic development in the United States, Japan and the Soviet Union.

Thus, I suggest, there gradually emerges a group of individuals, creative, alienated from traditional values, driven by a gnawing burning drive to prove themselves (to themselves, as well as to their fellows), seeking for an area in which to do so, preferably an area in which they can gain power, and preferably also one in which in some symbolic way they can vent their rage at the elites who have caused their troubles.

What they turn to will be determined in part by the models they find during their childhood somewhere in their history or their folklore or the tales their elders tell them of the life around them, and in part by the objective opportunities of the world around them. Few socially rebellious groups today in traditional societies are likely to find any other road to power, recognition, and proof to oneself of one's ability as inviting as economic prowess, and creative individuals in most such groups will become economic innovators. In the cases of England, Japan, and Colombia, which I have examined in some detail, such groups have provided a disproportionate share of the leaders in the transition to economic growth.

A cautionary comment is in order. Withdrawal of status respect, continued over a period of some generations, tends to cause the disparaged group to turn against some of the values of the group disparaging them. The fact that the disparaging group, in the cases cited above, was traditional, is one of the reasons why the disparaged group rejected traditional values and turned to innovation.

In ex-colonial societies, there has been rather harsh withdrawal of status respect, but by invading groups from the West who became colonial conquerors. Insofar as the indigenous groups who are disparaged tend to reject the values of the disparaging group, this may cause them to reject the occupations of the conquerors, even while they strive to gain symbols of economic power. Thus, in addition to the traditional

blocks, an additional emotional block may have been put in the way of the indigenous elite becoming industrialists. This fact may explain some of the ambivalence and erratic behavior sometimes manifested.

The theory, some of whose central points have been sketched so briefly above, proceeds in broad sweeps, and of course is subject to a corresponding margin of error. It seems plausible to me because it is internally consistent and because it explains many aspects of social, political, and economic behavior in low-income countries for which no other very logical explanation seems available.

If it is correct, it does not follow that economic growth will succeed only where certain rather special historical conditions have existed. For, the forces of modern history have caused social tensions within low-income societies, by virtue of which some degree of withdrawal of status respect has existed among the indigenous social classes of almost all of them.

This analysis of certain aspects of traditional personality and how change in them occurs has several corollaries. One is that where individuals in a traditional society fail to adopt methods which to an adviser seem obviously to their advantage, there is always a reason. The reasons are apt to be attitudes and values of which both the adviser and the indigenous individual are unconscious. Instead of simply feeling growing frustration, the adviser will do well to try to figure out what the reasons may be.

A second corollary is that attitudes and values are not apt to be changed greatly by formal education or by exhortations or logical explanations in adult life. While this statement is subject to certain qualifications, the adviser in the main will have to take attitudes and values for granted. He cannot change them; he should therefore adapt his advice to them.

The adviser himself is being parochial and unimaginative when he simply tries to mold the person he is advising to Western methods. He will be far more effective if he can devise adaptations of Western methods so that they will serve a technical end fairly well while being reasonably consistent with the attitudes and values of the indigenous individuals. For example, American factory organization involves extensive delegation of authority and responsibility. That kind of organization will not work where yielding some of one's authority to subordinates demeans one. Yet, concentration of authority even in small matters in the board of directors may bring the operation of the factory almost to a halt. In such a situation, the factory will function well only if organization and procedures are worked out in such a way that day-to-day decisions throughout the plant can be made without delay, without offensive formal delegation of authority.

It may be objected that what is being asked for is concentration of authority and delegation of authority at the same time. Parallel contradictions will seem to be present in many other adaptations that must be made. If an adviser objects that such adaptations will ruin efficiency, and in any event are impossible, a question is pertinent: If he is not able to be innovational, can he reasonably expect the person he is advising to be so?

In conclusion, a comment concerning the value of education may prevent misunderstanding. Notwithstanding the emphasis in various writings of recent years on investment in human resources, formal education is not apt to produce important changes in the degree of an individual's creativity or his values. It can result in a flowering of interests and expansion of horizons in individuals whose infancy and childhood provided a favorable basis, but almost certainly not in other individuals. However, creativity and receptivity to change are matters of degree: virtually every childhood provided some basis; virtually any individual may respond to a limited extent. Furthermore, education has the very important function of providing tools of literacy and general knowledge as well as of vocational and technical skills. Even though formal education cannot greatly change basic personality traits, broad education programs are therefore desirable; nothing in the analysis presented here should be thought to suggest the contrary.

CONFLICTS OF ATTITUDES AND VALUES IN SOCIAL AND ECONOMIC DEVELOPMENT

Peter Marris

[From Family and Social Change in an African City: A Study of Rehousing in Lagos; Copyright 1961 by Institute of Community Studies; Evanston, Illinois, Northwestern University Press, 1962, xv and 180 pp.; also London, Routledge & Kegan Paul, 1961, 196 pp.]

[The attitudes and values characteristic of traditional societies do not only inhibit the process of social change and economic growth; sometimes, they also openly conflict with the new attitudes and values that characterize the modern, more productive groups within the changing society. These psychological and social conflicts, which occur in the transformation of traditional societies, need to be better understood by development planners and administrators so that they can be effectively taken into account in development policy-making and implementation.

Sponsored by the Institute of Community Studies, London, Peter Marris' book Family and Social Change in an African City helps significantly toward filling this need as far as Africa south of the Sahara is concerned. It is a detailed study of a slum clearance and rehousing project in Lagos, Nigeria, from the point of view of its effects on the ways of living of the people involved. (A summary description by the author of the project itself and of its effects on living standards and family relationships was presented on pp. 81-91 of

Excerpts from Chapter 10 of the book begin on the next page.

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The material for this study was collected during a visit to Lagos from July 1958 to August 1959.

the October 1962 issue of the Development Research Digest, Vol. 1, No. 2.) In a concluding chapter, Mr. Marris discusses the more basic cleavages in attitudes and values within changing Nigerian society which were revealed and sometimes intensified by the impact of the project on individuals and families. The excerpts from this chapter reprinted below show vividly the conflicts between traditional family and personal loyalties and the new motivations of Africans who are committed to modern forms of living and working.

The book as a whole is a model of development research both in methodology and in the depth and incisiveness of the author's analysis. Even those people not specifically concerned with housing and slum clearance would find that reading this book would be most rewarding in terms of increased understanding of the process and problems of social change in Africa today.]

Since the physical space in which people live and work moulds their social behavior, any radical rebuilding of a city calls into question the accustomed social pattern. The rehousing estate at Suru Lere [on the outskirts of Lagos] was not designed to accommodate an existing pattern of life. It attempted to reform it, to retrieve human dignity from surroundings felt to be degrading. New standards of space and amenity, and a separate dwelling for each household, would encourage people to take pride in their homes, and adopt the accepted symbols of a progressive society. But in effect, if not intentionally, these reforms encouraged a much more radical change in social patterns. Well-spaced streets with shrubs and gardens could only be provided where the residents would be a long way from their work and their relatives, and they could only pay for this suburban life at the sacrifice of other claims upon their resources. Households became isolated from their wider family groups, and obligations to their kin were much more difficult to fulfill. The estate, therefore, encouraged a new interpretation of social values, in which privacy, independence and domestic comfort displaced traditional loyalties. These values were foreign to most of the residents of the estate, who were only frustrated by the difficulties which beset them when they tried to maintain their family ties, and the mutual exchange of gifts and services. But a minority welcomed their release from the traditional conception of family life more than any other advantage which the estate could offer. Such different reactions suggest that there may be a growing divergence in Lagos society, between those who still depend upon traditional family loyalties, and those who are increasingly frustrated by them: a divergence in styles of life related to a corresponding divergence in wealth and status.

Values of the New Elite

Most of the householders interviewed, who resented the authority and interference of their families, and the continual demands upon their resources, were young men in relatively secure and well-paid jobs, with prospects of promotion. This group in Lagos society tends to spend both their working life and much of their leisure in organizations inspired or promoted by European models. They work in banks, Government departments, foreign firms, and in their spare time they take an active part in the social betterment promoted and patronised by leading Lagos families. They are scouts, boys' club leaders, keen members of church clubs and societies for the prevention of cruelty to children and animals; they study first aid, attend British Council lectures, become special constables. They have constantly before them European conceptions of social responsibility and self-improvement. Positions of power are almost within their reach, and some of their schoolmates -- with luck, ability and training -- have already achieved them. They wrestle with correspondence courses far into the night, and dream of taking a degree abroad. Above them is the elite of senior civil servants and commercial managers who have inherited the villas, cars and four-figure salaries of the colonial regime.

This personal ambition is generally admired, and sanctioned by generous rewards for the most successful. Nigeria has inherited a sophisticated political and bureaucratic structure, and has begun to develop an equally sophisticated economy. Trained technicians and administrators are urgently needed, and there is no established aristocracy capable of filling all these posts. Education in the techniques of modern European culture is seen as fundamental to the progress of the nation, and is therefore the essential qualification for personal success. Nor is such education confined to the children of the well-to-do: government scholarships, grants from tribal associations, the pooling of family resources, promotion of talent by large commercial undertakings, provide a chance for anyone with ability, and the luck to be in the right place at the right time. Anything which frustrates the exploitation of this talent is seen as an enemy of progress -- ties of sentiment which root people in a conservative way of life, claims upon them which rob them of the rewards of personal endeavor, deference to authority not based upon achievement. Individualism and competitiveness have not been accepted in mere imitation of European values. They are essential to bring forward men and women competent to sustain the new structure of political and economic power.

Values of the Traditional Society

This conception of power as based on legitimate personal ambition differs profoundly from traditional Yoruba culture. For several centuries, the power and prosperity of the Yoruba were not seriously

challenged by any rivals. There was therefore little incentive to evolve new political or economic techniques. Nor was there much incentive to compete in private wealth; fertile land was freely available for cultivation, and everyone was either farmer or craftsman, enjoying a very uniform standard of life. Men could only compete in power. But opportunities to seek power were carefully circumscribed. Unrestricted competition would only have led to civil strife, and the dominant personalities that would emerge from such conflict had no value in a loose political structure where strong central government served no purpose. Within the lineage, authority depended upon seniority. Within the town, it lay with chiefs and societies of titled men, who derived their positions from their membership of lineages, in which a hereditary right to fill the chieftancy rested. The duties of the king himself were ceremonial and sacred, rather than governmental, but he too was selected from a particular lineage with hereditary rights. Rivalry for office was therefore limited to a few candidates qualified by their membership of the appropriate lineage. But this principle was further refined to prevent power from becoming entrenched in a hereditary aristocracy. The lineages were sub-divided into branches, and each branch was entitled to fill the chieftancy in turn. The children of a chief were not eligible to succeed him: the privilege passed to a related descent group. Since these groups were large, eligibility for office remained widely dispersed. Nor could wealth become permanently concentrated in a few hands.

The holders of power might accumulate much personal riches in their lifetime, from the gifts presented to them in exercise of their office, but it was rapidly re-distributed. A man's personal property was divided equally between the groups of children born to him by each of his wives, and the share of each group was equitably sub-divided amongst themselves. Since a chief would have many wives and children, his wealth was therefore soon dispersed. The wealth acquired by the king himself while on the throne passed to his successor, not to his kin: it symbolised the standing of the kingdom, and he held it only in trust. Thus traditional Yoruba society discouraged competition for power, and limited its rewards. The farms on which the economy rested were in any case held in common by the family, and ultimately by the king on behalf of his people. No individual had a right to dispose of the use of land he had enjoyed in his lifetime. Both ownership and prestige lay in the lineage, rather than the individual, and no lineage could easily establish lasting ascendancy over the town.

The predominant pattern of family life in central Lagos derives from Yoruba culture. Although it has evolved further from its origins than in the Western Region, the moral and emotional pressures on the individual to subordinate his personal interests to those of his family group are still powerful. This subordination, which threatens a stultifying conservatism in political and economic life, still satisfies

the need to belong, to express through the loyalty it demands a reciprocal commitment of affection. But it is increasingly difficult to reconcile the values inherent in this pattern of family relationships with those that influence clerks and professional workers in their career.

Conflict of Values

In the first place, age loses its authority when the experience of one generation becomes irrelevant to the next. In a rapidly changing society, children work at different occupations from their fathers, or the nature of the work has changed out of recognition. Amongst the men interviewed in central Lagos, only a quarter worked in the same class of occupation as their father, and on the rehousing estate only a fifth. The sons of farmers and traders became skilled craftsmen and office workers, and there was therefore much in which their fathers would not know how to advise or direct them. It is even more difficult to defer to seniority when children have more education and higher status than their parents. In formal family councils, the authority of age and education has sometimes been reconciled, by remodelling their procedure on the lines of a committee, in which the best educated act as secretaries and treasurers. The family acts together less as a lineage under its head, and more as a voluntary society where kinship is the condition of membership. But in personal relationships, uncomfortable conflicts between educated ideals and traditional loyalties still arise. For instance, a grandmother has a recognised claim to keep some of her grandchildren under her care, for company and to help her about the house. But an educated man may be reluctant to entrust his children's upbringing to his mother. She may not share his modern views on child welfare, may fill their minds with what he regards as superstitious nonsense, and treat their illnesses by old wives' remedies. Yet a refusal might deeply offend her. Again, a man who holds an executive position in a Government department or commercial firm must be ready to accept posting to branches and offices throughout the country in the interests of his job. But his parents may refuse to part from him. The conflict between educated ideals and legitimate ambition, on the one hand, and deference to the claims of affection on the other, can give rise to very difficult moral choices. Young men may early determine to assert their independence, so as to discourage their parents from making demands on them which it would be painful to refuse.

A similar conflict may arise over the place of a man's wife in his family. Under the traditional conception of marriage, a woman marries into her husband's family, and subordinates herself to their authority. Like her husband, she must accept the control and advice of her seniors, and share the life of the other women of her husband's compound. But the more educated the husband, the more likely that he will be influenced by Christian conceptions of equality and companionship in marriage.

He sees them reflected in the social conventions of expatriate colleagues, and in the aims of voluntary and official welfare agencies. Moreover, the ideals of work as a vocation, and ambition as a social duty, encourage a mutual dependence of feeling in marriage which discounts other claims of affection. Just as the husband must be uninhibited by family ties if he is to pursue his career, so his wife must be free to follow him. In traditional society, marriage was designed above all to ensure that the lineage would continue to flourish from generation to generation. To the elite, it offers a relationship of mutual affection, which would make them less dependent for emotional security on the solidarity of the family group. As the authority of the lineage is called in question, so is its claim to an overriding loyalty: people begin to search for ways of satisfying their need of love which can more easily be reconciled with the new structure of power.

The family group does not, of course, intend to discourage the progress of its members. On the contrary, it will pool its resources to advance the most promising of them. The conflict arises when the men and women promoted by its efforts have to reconcile their obligation for this help with the demands of careers shaped by different values. The family does not act with disinterested generosity when it finances one of its members through university, since the graduate with his four-figure salary will be expected to contribute proportionately towards the needs of his kin. If they sell four houses to pay his college fees, and he returns from abroad to set himself apart, and spend his money on his home, they will feel cheated. But he is only following the cultural values he has acquired through his education, and which will earn him respect in his profession. The tradition of mutual support is the most concrete expression of family solidarity, but it becomes increasingly unworkable as the members of the family diverge in income and styles of life. As men are promoted in the ranks of the civil service or commercial firms, they find themselves no longer contributors towards a mutual exchange of gifts and services, but the victims of demands which may be beyond their means. To their poorer cousins, their wealth seems so great as to be inexhaustible. Faced with insistent, even predatory claims, they may begin to restrict the range of relatives to whom they recognise an obligation. Many of them, besides, may have made their own way by government scholarships, or by promotion within their firm, and feel that they owe little to their kin. They themselves no longer stand to gain from the support of their relatives: they enjoy high and secure incomes, with a pension to provide for their retirement. Then, again, they are not altogether free to spend their money on others even if they wish. With the senior civil service post comes government quarters in a secluded suburb, designed for the commuter with his own car, and servants for his house and garden. The senior executive of a commercial firm will be expected to uphold its prestige in his social manners. To an employer, the claims of

kin are a thoughtless exploitation of his executives which robs them of the rewards of their efforts. Whenever he tries to ensure them an income which would leave them free to concentrate without anxiety on their work, their financial liabilities only increase. Promotion may even put them seriously in debt, overburdened by new obligations they do not know how to refuse. Moreover, if men seek responsible positions in the interests of their family, rather than society as a whole, they are under pressure to abuse their authority by nepotism and corruption.

Only the financially self-sufficient can afford to be independent of their family group. The rest depend upon its support as their best insurance against hardship. They do not enjoy old age pensions, sickness or unemployment benefits, a guaranteed livelihood. Without the chance of a higher education, the opportunities in the civil service and managerial firms are remote. For them, the tradition of family loyalty still fulfills a vital need.

Consequences for Social Change

So the patterns of life of rich and poor may increasingly diverge, as the most successful members of society detach themselves from their family group. And these differences could consolidate in a kind of class division which Nigeria has so far escaped. Family ties cut across hierarchies of status. A labourer can claim the hospitality and consideration of his senior civil service cousin. Wealth is redistributed in meeting family obligations, and the manners of an egalitarian society surmount gross inequalities of income. But the more the better-off are driven to restrict the range of their commitments, the less absolute will be the claim of kinship to override differences in income and status. Moreover, the present generation of managers and professional men has not arisen from an established aristocracy, and until the transfer of power and technical skill from expatriates to Nigerians is complete, there will be many opportunities for talent to enter the elite. The power and prestige of the successful represent a triumph over colonial dependence in which everyone can take pride, and those whose personal aspirations have been disappointed can still hope for their children. But in the next generation, the ranks of the elite will no longer be expanding so fast, and they may increasingly be filled by those whose parents have been able to buy them a higher education. Unlike traditional society, power rests on qualifications which a father can hand on to his son, and the most valuable economic asset is no longer land owned in common, but an education which by its nature cannot be shared. Poorer families will find it more and more difficult to promote their own candidates for the best paid jobs. Professional status will be less admired as a patriotic achievement, and more resented as the privilege of an exclusive class. For the excluded, their family solidarity may become generalised in a system of values which rejects outright an individualism whose rewards they cannot share.

Modern technology and bureaucracy, therefore, continually widen the social distance which family loyalties have bridged. If this bridge collapses, there is no political tradition of egalitarianism in Nigeria powerful enough to challenge the growth of class divisions.

Thus the conflicts which the salaried workers of Lagos are trying to resolve in their family life involved a far-reaching reinterpretation of the values which their traditions express. The claims of the family group can be seen as an attempt to exert an outworn authority, inhibiting legitimate ambition; as an economic parasitism, robbing this ambition of its rewards; as an assertion of nepotism over social responsibility. But they also represent a system of social welfare; a challenge to self-seeking and class interest, a widespreading and secure emotional attachment. To abandon them would destroy the informal social justice and emotional security which maintain the balance of a rapidly changing society.

Such a conflict of values is not peculiar to Nigeria, or even to African society. To escape an intolerable loneliness, people need relationships on which they can depend. But this unconditional support demands in return a commitment which limits their freedom, and the wider these relationships extend, the more people are rooted in a particular way of life. In a society which is rapidly changing, and especially in the groups within a society most exposed to change, the conflict becomes acute. As people respond to the opportunity to improve their wealth and status, they tend to become insecure: their feelings become restricted to the relationships which can adapt to their changing style of life, and the loyalties they have abandoned dog them with a sense of guilt. And the more society sanctions this individualism in the interests of its evolution, the more it becomes concerned with problems of isolation, neglect and social injustice. A wealthy nation can endeavor to restore at least the material imbalance by a comprehensive public welfare service. But Nigeria has neither the money nor the trained personnel to sustain such a service. It seems all the more essential, therefore, to adapt their traditions of family life, so that they may still provide emotional security and mutual welfare, and challenge the exclusiveness of wealth and status.

Such an adaptation may already be taking place in family councils. The procedure seems to be becoming more democratic, and more formal. It allows young men with education a voice in affairs, and the property which the family holds in common can be more efficiently handled. If, too, mutual welfare and the distribution of obligations are settled in these meetings, each member is better protected against exploitation. He can more easily refuse claims not sanctioned by the family council, and appeal to it against unreasonable demands. At the same time, he remains under a clearly formulated obligation to respond to the needs of his kin, to care for the old, and encourage the abilities of the

young. The pattern of residence adapts itself correspondingly. The family house is no longer the home in which most of the members of the lineage live. It may be rented out, and the income used for the benefit of the family; or it may provide a home for dependent relatives. But it remains the headquarters of the family, a visible symbol of its unity and continuity. So, although each household may prefer an independent dwelling, where there is more privacy and less risk of quarrels between wives and their parents-in-law, they still have their roots in a common home. The traditions of family life need not merely disintegrate before the pressures of social change.

In both private life and public policy, the urgency of progress threatens the balance of society. In haste to command the symbols of material prosperity, an underlying disintegration may be dangerously ignored. If so, the next generation will inherit problems more intractable than economic growth and the assertion of nationhood.

TRADITIONAL CULTURES: AND THE
IMPACT OF TECHNOLOGICAL CHANGE

George M. Foster

[New York, Harper & Row, Publishers, Inc.,
1962, xiii and 292 pp.]

Though primarily intended for the education of U.S. technical assistance specialists working in Latin America, Asia and Africa, this book would also be useful to the government officials, development technicians and others in underdeveloped countries trying to accelerate the complex process of social change and economic growth.

On the basis of many years of experience both in field research and in technical assistance programs, Dr. Foster -- Professor of Anthropology at the University of California, Berkeley -- analyzes in simple nontechnical language the relationships between technological innovation and the socio-cultural environment in which it takes place in underdeveloped countries. He describes the specific ways in which traditional attitudes, values, beliefs, and institutions, particularly among rural people, hinder or condition the adoption of more productive methods of work and of healthier and more comfortable forms of living. This analysis is liberally illustrated with examples drawn from all parts of the less developed world and with aptly chosen quotations from real-life informants in many underdeveloped countries as well as from the writings of leading social scientists.

Dr. Foster devotes several chapters to the work of the applied anthropologist, explaining the proper role which he can play in the preparation and implementation of technical assistance programs. Too often, he points out, technical assistance specialists expect the anthropologist to do too little or too much, and sometimes the anthropologists themselves exceed or fall short of the legitimate requirements of their assignments.

Though the book deals mainly with the social, cultural and psychological obstacles to desired changes in the underdeveloped countries, Dr. Foster's approach is a positive and constructive one. In many cases, he shows how the negative result of an attempted technological improvement might have been avoided had adequate attention been paid to the particular attitudes and institutions which, from the point of view of the local people involved, were significant considerations. Often the foreign expert, or the Western-educated local official or technician, would ignore cultural and social factors that were of major concern to the people to whom he was trying to introduce a new way of living or of working together.

In a final chapter concerned with the ethics of planned change, Dr. Foster offers some guidelines relevant to both foreign and local development personnel:

"The ethic of helping people change their culture begins with a readiness to understand that culture, to recognize the good in it, and to know the reasons why it is what it is. This is not simply the morality of cultural relativism. It is not simply tolerance and broad-mindedness. It is a basic wisdom for the technical agent. For in every culture there is a reason for each element. Sometimes the reason is no longer valid; change then will not be dangerous. Other times the reason is still valid, and change may spell disaster....

"Uneducated peoples may be wrong on technical matters; they often are. But until we are sure they are wrong on a particular point, it is unwise and morally wrong to try to 'improve' them. It is wrong to assume that a way, because it is modern, scientific, and Western, is better than a traditional method....

"The ethic of helping people change their culture includes knowing what culture is, what its characteristics are, what it means to a society, and what its processes of change are. It is not enough to be a competent technician, morally fortified with the unquestioned assumptions of goodness of one's profession. One must be a responsibly competent technician, aware that any technical improvement has social and economic consequences that may or may not be deleterious. The responsible technician is the one who is able to help adapt scientific technology and methods to the ecological, social, and economic environment of the developing country, but who does not think that good consists in leading others to do things as he does....

"The ethic of helping people change involves restraint and caution in missionary zeal. It means that developmental personnel should be careful not to plan for people, but to work with them in searching for realistic answers to their problems. The helpful technical expert is

the one who knows how to explain the range of alternatives possible in a given situation and to explain the probable consequences of each one. He encourages people to try new things when he believes they will solve problems and when they will not do excessive violence to a total way of life. He discourages them if they wish to try new things which seem incompatible with reality. But above all he leaves the decision to the people themselves; in the long run they, not he, are the ones who must be pleased."

TRAINING

POSSIBILITIES FOR IN-SERVICE TRAINING

Frederick H. Harbison

[From "Human Resources Development Planning in Modernising Economies"; International Labour Review, International Labour Office, Geneva, Vol. LXXXV, No. 5, May 1962, pp. 445-448.]

These are excerpts from the article.

The potentialities of fully utilising government agencies, private employers, expatriate firms and foreign technical experts as trainers and developers of manpower [in less developed countries] are enormous, but they are seldom fully understood by the leaders of most of these countries. Human resources development is usually equated with investments in formal education, and government, business, and education leaders for some reason cling to the notion that schools and universities alone can prefabricate the skills needed. To be sure, they may be quick to see the need for technical training, but, unfortunately, just as quick to assume that the system of formal education must somehow be given the responsibility for it.

It is important to understand that training and education are two quite different processes, and planners should draw a sharp distinction between them. Training involves the development of specific skills which are needed to perform a particular job or series of jobs. Education involves the acquisition of general knowledge and development of basic mental ability. Both training and education are involved in human capital formation. Education is, of course, a prerequisite for various kinds of training. But this does not mean that the responsibility for training and the responsibility for education are inseparable.

The strategy of modernising nations should be to shift as much responsibility as possible for training to the major employing institutions. These include government ministries, public or quasi-public enterprises, private industry and commerce, and foreign-owned and managed firms. At the same time, the strategy should aim at exploiting more systematically the training possibilities of technical assistance.

The government, as the largest employing institution, should take the lead in shouldering this responsibility. Most of the arts of public administration can be developed effectively by a well-conceived and organised programme of in-service training. It is likewise practical for the appropriate employing ministries to train craftsmen, senior clerical employees, and even certain categories of sub-professional technical personnel. Each major government ministry, therefore, should have a training organisation responsible for on-the-job training; in-service programmes of instruction; supplementary off-the-job programmes of training in co-operation with educational institutions; periodic examination of accomplishment; and certification of qualification for promotion and advancement. The techniques of in-service training of this kind are available, but the idea that the government-as-employer should assume responsibility for such training is to most leaders in newly developing countries completely strange and unorthodox.

In many countries, the military establishment is an important skill-building institution. It develops skilled craftsmen and clerical personnel; it trains a variety of technicians; and it must teach its officers the principles of administration. In some cases, it may need to provide literacy and language courses as well. From top to bottom, therefore, the military is a kind of training organisation.

Many newly developing countries could greatly speed up the process of human capital formation if they purposely used the armed forces as an institution for training civilian as well as military manpower. For many young men, a period of compulsory military service may be the most effective avenue for developing skills needed in the civilian economy. Army officers frequently turn out to be excellent managers of new industrial enterprises (as, for example, in Egypt). And even, in some cases, military personnel may be assigned to certain kinds of teaching activities in vocational schools. Thus, the use of the military as a generator of trained manpower for the economy as a whole deserves serious study. Careful consideration of its potential contributions, as well as its shortcomings, should be an integral part of any strategy for manpower development.

At the same time, pressure should be exerted upon the non-government employing institutions to assume a corresponding responsibility for training. The larger enterprises should be expected to have foreman training and manager development programmes. They should also be

required to assume major responsibility for training of their own craftsmen, clerical workers, and some categories of technicians as well as semi-skilled production workers. In short, the development of human capital through in-service training should be accepted as an integral part of business operations.

The small employer can also carry some of the burden of training, and in practice he often carries more than his share. In Nigeria, for example, most lorries and automobiles are repaired in small shops consisting of an owner and several apprentices, who may even pay him for the opportunity of learning a trade. The handicraft industries in most countries are completely dependent upon an informal apprenticeship system. The planners in the modernising countries will be well advised not to replace such systems by costly vocational schools, but rather to try to improve them by providing programmes of technical assistance in apprenticeship and on-the-job training.

The foreign-owned enterprise can be a powerful instrument of human capital formation if it is handled properly, because its training capacity is usually greater than that of the local enterprises. The host country should allow the foreign firm to bring in as many expatriates as it wishes, provided that it guarantees to train local nationals to take over their jobs within a reasonable specified time. In most instances, the foreign firm develops more people than it uses itself. For example, craftsmen and mechanics trained by an expatriate oil company may take jobs in other local industries; or service station attendants may soon become independent dealers. A well-trained foreman in a foreign-owned truck assembly plant may be the future organiser of a locally managed parts factory. Unquestionably, a more deliberate and carefully planned policy of using the expatriate firm as a training institution could greatly accelerate the process of human capital formation in many countries, and politicians should be more concerned with exploiting this asset to the maximum than with placing arbitrary restrictions on the employment of expatriate personnel.

Finally, the newly developing countries should fully exploit the potentialities of technical assistance as a training institution. To the maximum extent possible, the purpose of technical assistance should be to train one or more individuals to do work which was previously done by a foreigner, or not done at all. It is shortsighted to invite foreign technical experts to a country to handle operations or merely to make studies or surveys. In whatever activity they are engaged, the responsibility of foreign experts should be to train counterparts -- to transmit knowledge by developing people.

The advantages of utilising employing institutions and technical assistance staff as trainers and developers of manpower would appear to be blindingly obvious. But the failure to do so is almost universal in

newly developing countries. Outside technical experts are employed to engage in operations, and often local counterparts are not assigned to them for training. The government ministries are too busy to spend time on in-service training, and complain when vocational schools and universities send them poorly trained recruits with queer attitudes towards work. The idea that training is a continuous process of human resources development rather than a simple pre-employment indoctrination seems to escape politicians, planners, and public and private employers alike. The solution here is relatively simple. If the employing institutions are shouldered with the responsibility for a considerable amount of training, they will have an incentive to provide it. If they have the incentive to undertake it, the technical means of carrying it out are available from a variety of sources.

No one would argue, of course, that all training activity can or should be undertaken by the employing institutions. Many skills must be developed in schools, colleges, and universities. Teachers, engineers, scientists, agronomists, doctors and many kinds of sub-professional personnel are not likely to be effectively trained in employment. And some kinds of crafts are learned better in schools than through apprenticeship or on-the-job training arrangements.

In the main, however, the essential function of formal education is to prepare people for training rather than to train people for particular occupations. In other words, the principal output of formal education should be educated "trainable" people.

TRAINING FOR COMMUNITY DEVELOPMENT

T. R. Batten

[From Training for Community Development: A Critical Study of Method; Copyrighted 1962 and published by the Oxford University Press, London, viii and 192 pp.]

[An outstanding "trainer of trainers" for community development work, Professor T. R. Batten of the Institute of Education, University of London, has summarized the results of his many years of experience in this book.

In the words of his preface, Professor Batten was moved to write this book because "administrators responsible for community development programmes commonly find themselves faced with two major training needs with which traditional training methods have proved quite inadequate to cope: the one, to develop in the field workers a satisfactory level of skill in working with people; and the other, to provide effective orientation training for all the administrators, departmental officers, unofficials, and village leaders whose interest and cooperation is needed to ensure success. There have been many attempts to find solutions to these two problems, but with very uneven results. In practice, trainers have found attitudes very hard to change, and skill in working with people almost equally hard to teach.

"It is with these two problems that I am mainly concerned in this book. In Part One I examine current training policies and practice with frequent reference to recent field studies. In Part Two I draw certain conclusions about the need for further change. In Part Three I describe the methods and techniques we have evolved for dealing with these two training problems in our own Institute Course [at the University of London]."

A summary of Chapter 3 of the book begins on the next page.

As this passage illustrates, the book is written in a clear, simple and very readable style. Professor Batten is pragmatically oriented, and avoids both the rhetorical

exhortations and the professionalized vocabulary too often affected by experts in the social development field. Containing many practical illustrations and useful suggestions, this book will be an invaluable source of insight and information to all engaged in community development work.

So that those concerned more broadly with economic and social development may derive a better understanding of the problems of training community development workers, one of the key chapters in Part I is summarized here.7

Training Paid Workers

It is never easy to train the community development worker, however well he has been selected. Workers must learn something of a wide range of program purposes and activities, such as agriculture, horticulture, irrigation, cooperatives, animal husbandry, public works, social education and youth welfare. And, since they must always work directly with people, it is essential that they be able to influence people's attitudes toward the community development program and toward each other.

There is a common sense solution to the difficulty of providing training in so many subjects: No more should be included in the syllabus than can be properly taught in the time available. The real difficulty lies in teaching trainees to work with adults who may be mistrustful or apathetic, or divided among themselves by factional conflicts or rivalries.

Many of the early inadequacies of community development training arose because the special problems inherent in such training were not clearly understood. Assumptions belonging to traditional forms of training were applied: basically, it was assumed that it is the trainer who trains and the trainees who are trained. Training was seen as a process of instruction in which knowledge was transmitted from instructor to trainee. This approach naturally puts the main stress on pre-service training, intended to produce "fully-fledged" trainees (with in-service training regarded as an "extra"). It prefers that groups of trainees should all be in training for the same kind of work, and that instruction be organized on a "subject" basis and provided in special training centers or institutions. Traditionally, too, it puts the trainer in a position of great authority over the trainees.

These assumptions have not proved entirely satisfactory in community development training. They can equip the community development worker with knowledge and skill in the purely technical aspects of his work. But, in that major part of training intended to help him work

successfully with people, they are less appropriate. Here, no clear answers are possible: no two situations are ever alike, and much must always depend on the judgment of the man on the spot. Even in seemingly comparable situations, the same action by the same worker may produce widely differing results.

Thus, the trainer has somehow to equip his trainees with sufficient perceptiveness and skill to achieve their purposes in an infinite variety of future situations; purposes, moreover, which are inherently difficult to achieve because they usually involve attempts to change people's outlook on life and their attitudes to each other. Field reports show that he often fails to do so. Trainees, to quote a typical report, "do not know how to apply the knowledge they are taught in the Extension Training Centers."

An initial reaction is to conclude that more time should be spent in supervising practice in the villages, rather than in formal lecturing. This implies some reassessment of the trainer's function, no longer seeing him primarily as an instructor, but rather as an organizer of real-life experiences in which his students participate, and from which they learn. But, while this kind of function is of great value in some types of training (e.g. medical students working in hospitals, and teachers in schools), it is less easy to provide community development trainees with really useful experience of working with people -- and still more difficult to help them draw the appropriate lessons from it. Even when training centers are sited in or near a typical village community, it quickly ceases to be typical when successive groups of students repeatedly descend upon the same village for practice in "community work." It is difficult to provide trainees with enough continuous practice for them to get to know the village people, understand their problems, start a project and see it through to the end. Short or discontinuous practice periods tend to frustrate both the trainees and the village people with whom they work. Supervision is not easy, since for individual practice the trainees must be scattered in many villages.

These difficulties in providing satisfactory village practice have led many trainers to look for ways of supplementing it. It is worth noting that the training problem is greatly eased if selection of trainees has been weighted in favor of maturity and previous experience. Another way of ensuring that trainees have some relevant knowledge prior to training is to arrange that each should spend some time near his home "apprenticed" to an already trained and competent worker.

But to provide good village practice is only the first step. The real problem is to ensure that the trainees learn from it lessons that

will help them in their future work: that, for instance, they must learn to work with the villagers as they are; that they must try to see themselves and their purposes as the villagers see them; and that they must make use of their insights to work out more realistic approaches to their problems. This is why training center staffs should discuss field experiences with the trainees. Even so, it is difficult to ensure that village practice is long and varied enough to provide experience of more than a few problems. For this reason, some training centers have begun to use case-studies as a means of supplementing field experience.

Such case-studies should not be too detailed. If they both present a problem and explain and solve it, they miss the main value of case-studies for training: to confront the trainees with a problem they are likely to encounter in their work, but to leave to them the task of diagnosing it and suggesting ways of dealing with it. A case-study should be limited to describing the worker's purpose, his initial assessment of the situation, what he tried to do, how exactly he tried to do it, and with what effect. Studies of failures are invariably the most useful because they force the trainees to think for themselves. The fact that trainees may have had little field experience does not limit the value of case-studies. Trainees have all had experience of living with people, and they are people themselves. Once they are stimulated by a case-study to think concretely about why people reacted to a community development worker in the way they did, and begin to think of themselves as people in the same situation, among them they can usually contribute a flood of sound suggestions. They learn from discussion of the case-study -- from each other -- not from the case-study itself.

It is one thing to draw lessons from experience to guide future work, but quite another to develop the practical skill to do it well. Skill in choosing just the right words and saying them in just the right way may be developed through the technique of role playing. A problem is selected which shows a worker involved with one or more people in a situation which is described to the training group. Actors are chosen to represent the participants; each is briefed in the initial attitudes and purposes of the person whose role he is to play; but no one is told just what to say or how to react to the others. The role playing then starts with the "worker" trying to achieve his purpose, and the other actors reacting normally according to their briefing and according to what the worker says or does. At a suitable point, the trainer stops the action, and the group discusses whether the worker has succeeded. The trainees are given a safe opportunity of testing their skill in working with people, and of learning from their own and others' mistakes; they gain also a clearer understanding of why people do not always cooperate.

An important source of first-hand experience lies within the group itself, in the differing personalities, abilities and attitudes of the trainees themselves. The trainer, like the paid worker in any community development group, must recognize and work with these differences in order to help the trainees to function as a group. The trainer's own example is exceedingly important: it must strengthen and support the precepts that he teaches. He must show himself to be the friend and servant of the trainees, as they are to be of the people; he must show a sense of mission; he must work, as the trainees are intended to work, as a catalyst, not as an authoritarian leader.

But even the best preliminary training can never produce fully trained and competent community development workers. For one thing, there is never enough time. Training is generally limited to six or nine months; even in India, where village workers have eighteen months' training, some instructors believe the period should be extended to two years. For both village and other community development workers, an evaluation committee in Uttar Pradesh has concluded, it is desirable that after a year's work in the field the workers should be recalled for a general refresher course at which their experiences can be analyzed and discussed. A second reason for in-service courses is that they train the trainers as well as the field workers, keeping the trainers in touch with problems in the field and with the shortcomings of the preliminary training they have provided. A third reason is to keep field personnel abreast of changes in needs and of new information.

This new concept of preliminary and in-service training is not yet applied in the policies of some countries. Initial training is still planned to cover all basic training needs; in-service training is looked on as a useful addition to be introduced if and when funds and staff permit. Consequently, too much is crammed into the preliminary training. In contrast, if both preliminary and in-service training are planned together, a good deal can safely be left until the worker is on the job. This new approach gives trainees a greater interest in the training (since it is directly linked with work they are doing in the field); field work is also improved because training is still fresh and vivid in the workers' minds. This pattern has been found effective in American Friends Service Committee projects in India and in Jordan, and in national programs in Puerto Rico, Jamaica and Ghana.

These new ideas of training are now gaining ground in nearly every country. The effect has been to undermine almost all the

traditional assumptions about training. Training is now viewed as a continuing process, in which the trainer helps the workers to learn from their own experience; in which a great deal of training is not controlled by specialist instructors (since it is done "on-the-job" by the worker's own senior officer); and in which success depends largely upon the trainer being able to get the trainees to contribute significantly to the training themselves.

THE TRAINING AND RESEARCH PROGRAMMES OF THE INSTITUTE OF DEVELOPMENT ECONOMICS IN KARACHI

Henry J. Bruton

[One of the major obstacles to more effective planning of economic and social development is the scarcity of people trained to handle the complex methodology and techniques involved. Hence, in recent years, efforts have been made to increase the facilities for training development planners. At first, the only facilities available were in the universities and research institutes in North America and Western Europe. But, it was soon recognized that more intensive training, specifically adapted to the needs of particular countries and regions, could be obtained in training centers established in the developing countries for this purpose. In this paper, Dr. Henry J. Bruton describes such a training center -- the Institute of Development Economics in Pakistan. Prepared for the OECD's second annual meeting of Directors of Training Institutes in the field of economic development, this paper analyzes the experience of the Pakistan Institute and discusses the lessons learned from it. These are applicable also to a greater or lesser extent in other countries in the process of establishing or improving their own training and research centers.]

These are excerpts from the paper.

From the standpoint of planning for economic development, one of the most important characteristics of an underdeveloped economy is lack of information and understanding about such an economy. We have accumulated a considerable number of generalisations and insights

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about the development process and we have a large body of literature dealing with specific aspects of development. But when the planner begins the big and complicated task of making a development plan for the economy, lack of data and lack of analysis are likely to be handicaps of immense proportions. This is most assuredly the case in Pakistan. Data are available only on a handful of things and the data that are available are of such quality that they cannot be safely used for analytical work. Similarly we know little about any of the basic relationships that are usually assumed to govern an economic system.

In the broadest terms, this state of affairs -- the essentiality of data and the understanding of the economy if planning were to be done at all realistically and the absence of such data and understanding about the Pakistani economy -- explains the origin of the Stanford University Project in Pakistan and the Institute of Development Economics in Karachi. More specifically Pakistani officials charged with responsibility for making economic policy recognized that their staffs were inadequate to carry out the research necessary to provide the information and data required to formulate such policies rationally and meaningfully. Thus, the Institute was conceived as providing a place where research on issues that had immediate policy relevance would be done but which would not be concerned with making or even recommending policy. The Institute was born out of the recognition of the need for the basic understanding that emerges from formal research as an essential element in policy-making. This point is important because it emphasizes the fact that, although the Institute was and is a research organization, it is not research for research's sake, but research for policy's sake, that was to be its concern.

I

The Ford Foundation was approached by Pakistani officials as early as 1951 to support an economic research institute in Pakistan but the major efforts toward establishment and organization did not begin until the mid-fifties. It was made clear from the outset that the Institute would be completely free from political pressures, and assurances were given that the Institute was to have no formal relationship with the Planning Commission or any Department or Ministry of the Government of Pakistan. The Institute was to be -- and, indeed, is -- an autonomous organization. The supreme governing authority is a Board of Governors, but the general rules of administration and organization and the making of general policy are in the hands of an Executive Committee made up of seven distinguished Pakistanis.

The operating head is a Director who is helped by an Administrative Assistant. The Institute has a strength of 24 Staff Economists and six Senior Economists. The former are in general individuals with an M.A. degree from a Pakistani University and the latter have either a Ph.D. or

considerable experience and training in economics. These men are regular employees of the Institute and are paid a salary. Also there is an administration section to handle typing, etc.

The Ford Foundation agreed to supply funds to enable the Institute to have foreign advisers and to acquire books and other equipment from outside Pakistan. The Government of Pakistan provides an annual grant to cover the rupee cost -- chiefly salaries of the staff -- of running the Institute. In 1958, there were two advisers and now we have four and would like at least one more.

At the outset, Williams College agreed to be the "backstopping" institution. The Ford Foundation made its grant directly to Williams College and the College assumed the task of recruiting the advisers and of handling book and equipment orders and other administrative duties connected with the grant. The Director of the Project was Professor Emile Despres of Williams. In 1961, Professor Despres moved to Stanford University and the backstopping activities moved with him. We were the Williams College Project; now we are the Stanford University Project.

The role of the backstopping university is very important. It does more than recruit personnel and administer funds; it provides general advice on substantive matters and contact with other similar institutes where comparable work is being done. Effective and continuing interest on the part of the backstopping team can mean the difference between success and failure of the project.

As the Institute began, the first major task was the selection of a Director. It was, of course, evident that the Director should be a Pakistani, but Pakistani economists capable of doing the job were tied up elsewhere and could not be relieved. The search then turned abroad. Here again, it was difficult to find a man of the maturity and prestige and ability that the post seemed to require. A compromise solution was finally hit upon. Professor Despres would assume the post of Director and would spend a few months of each year in Karachi. (The posts of Director of the Project and Director of the Institute are not the same.) In his absence one of the foreign advisers would serve as Joint Director. This arrangement has continued to date and has, on the whole, worked very well.

Also of great importance are the foreign advisers, and recruitment here too is a major problem. The ideal adviser is one who is approaching his prime as a working economist, who is on top of his material and, most of all, who is a teacher. As we shall describe in the following sections, the research and training programmes at the Institute require that we have one adviser to work with no more than four Pakistanis. If the ratio is greater than this, then the effect of the adviser's work is spread so thin that it has little permanent impact.

As the Institute began to function, its primary activity was research. Any training or teaching was more or less incidental. However, as the work proceeded, it became increasingly clear that the staff was not equipped to do research, and, more importantly, did not seem to have the necessary background to learn to do research. It became evident that further formal training in economics was essential. On the basis of this conclusion, we began in 1962 a formal two-year Training Programme in Development Economics.

II

The Training Programme is open to anyone, whether an employee of the Institute or not, who is currently engaged in work calling for the use of economics and who has at least an M.A. degree in economics or sufficient experience in economic work to offset the lack of a degree. The programme requires one-half of the participants' working time. The other half they spend on their usual professional duties, which as noted involve some connection with economics.

As to content, the Training Programme was patterned after a similar programme at Williams College. The first year, we are offering two courses -- one on Basic Factors in Economic Development and the other on Quantitative Methods. Next year, we plan to offer courses in Money and Banking, International Trade and in Agriculture. The overriding idea in designing the content of the programme was to train the participants in the application of economics. Our objective is to help them to become equipped to do independent economic research, with an acceptable measure of competence, in a manner that has direct policy implications.

First of all, we had to recognize the quality of the participants. Most of those taking part in the first year's programme had an M.A. degree from a Pakistani university. But even with this common background, there was wide diversity in the capacities of the participants. This, of course, makes teaching difficult, as the material covered is likely to be easy for some and much too difficult for others. In future, we hope to be much more rigorous in our selection process in an effort to obtain participants of approximately uniform quality. In particular, we would prefer a programme to which were admitted only individuals who had received a first class or high second class M.A. degree from a Pakistani university.

In the second place, we had to consider what to teach, given the objective and the type of participant that we had. How do you teach a person to become an economist, as contrasted to teaching economics? I'm not sure that we solved this problem very well. We did pitch the first year courses around a conventional reading list, i.e. a reading list similar to that used in most universities in the United States offering courses in development. At the same time, however, we did two

other things that we hoped would be helpful. We required several (8 in the Development Principles course and about 12 in the Quantitative Economics course) short papers that were of the kind frequently called for by the senior policy-makers. Thus, rather than a more conventional term paper, we tried to design "issues" on which the participants were required to do some research -- certainly not "basic" -- and to write up their findings in a technical manner. To the extent possible, we always used "issues" of direct interest to Pakistan.

A third major question has to do with the extent to which we taught the more advanced techniques of economics. For example, it is evident that linear programming has immediate relevance as a tool in development planning. Indeed, making a development plan is in a sense solving a linear programming problem. But teaching such techniques raises a number of problems. In the first place, the data required to give empirical and practical content to these tools is not now available and is most unlikely to be available in the near future. Furthermore, the essential nature of the kind of economic analysis most needed now in Pakistan does not lend itself to the more sophisticated tools. Finally, it was evident that our participants had many other things to learn before they developed the intellectual maturity and technical competence to master these powerful tools and to apply them with the discretion necessary to reap from them the full reward. I would like to make clear that it is much more than a matter of lack of mathematical training, though this lack is also a handicap. We did a little work on input-output and more general linear programming models this past year. We won't next year. Neither will we go into the more advanced statistical methodology.

This is not to say that we do not seek rigour and refinement. We feel one of the most important things we can teach is how to consider a small, well-defined "issue" and examine it in exhaustive detail. But we cannot teach it in the manner that requires the acquisition of full command of the more powerful tools. We do not believe that our programme is thereby less "advanced" than graduate degree programmes in the West; it is, rather, designed differently and aimed differently.

I'm not sure how well we succeeded in the first year programme. In some simple matters, e.g. organization and writing style, we can claim some success. But on more fundamental matters the results are less clear. Certainly in the period of one year, we did not succeed in teaching our people how to come to grips with the data; how to use makeshift data; how to ask questions of the data; and how to unravel and trace down the implications of a particular policy or of a particular project. On the other hand, there was evidence that many of the participants began to see what is meant by research and what is the aim of economic research. In the research projects of the Institute, we have seen signs of a more systematic approach to problems, and even

clearer evidence of a more mature attitude toward research. In general, I think that we are on the right track. We will make further changes next year, chiefly in the direction of more written work and more specific problem exercises. The emphasis to be placed on "specific problem" exercises arose out of an evident tendency on the part of our trainees to content themselves with broad generalizations and a reluctance to narrow their problem area to the extent necessary to permit a thoroughgoing examination of one issue.

Perhaps the most important conclusion we reached from this first year programme is that the training necessary to turn out a reasonably good product from the kind of raw material we had is at least two years. I do not believe that there is any short cut in this. Efforts to speed up the process, to push the trainees harder than initially planned clearly were ineffective.

The Stanford Project also has funds for fellowships for graduate study abroad for those Institute staff members who show unusual promise in the Training Programme. We have sent 5 people to date, two of whom returned this past summer, and we will send an additional three men this fall. These fellowships are usually for one year, but if the recipient shows outstanding ability he may be allowed to stay on to complete the Ph.D. As the Training Programme improves and gains in effectiveness, we expect this part of the Project to be reduced in importance.

The conventional Ph.D. programme in the United States or a comparable programme in the United Kingdom or Western Europe is suitable only for a very few people in Pakistan. In fact, one of the major reasons for the Training Programme was the belief that foreign advanced training did not result in talent of either sufficient quantity or sufficient quality to meet Pakistan's needs. That need is not so much for a few highly skilled economists steeped in the literature and theory of economics but rather for a large cadre of solidly trained men well versed in the tools and techniques of economic inquiry as they can be used in Pakistan.

Such a cadre can be developed only through an indigenously inspired and directed educational programme. It is such training that we hope to develop at the Institute and, if we succeed, then we will rely less and less on foreign training. Of course, foreign education will always be helpful and interesting to anyone, but for achieving the objects stated in the second paragraph of this report it will be of marginal importance.

Although we found problems and shortcomings in the programme as it was designed last year, there is no doubt about its importance. The student with an M.A. from a Pakistani university is not equipped to perform as an independent research economist, and Pakistan sorely needs such economists. The problems we face now are concerned with the kind of programme, not whether to have a programme.

III

I turn now to the research activities of the Institute. I have already referred to the fact that, originally, research was the aim of the Institute. [Before the establishment of the Training Programme,] we published several monographs as well as the Economic Digest. These early monographs were of a high degree of excellence and were found useful by the professional economists in Pakistan. However, perhaps the major difficulty in this period was that the research was done chiefly by the foreign advisers, with the Pakistani staff helping but not learning very much about research in the process.

With the start of the Training Programme we also made changes in the nature of the research activities. Now, each professional staff member has his own research project. (Occasionally two men work together on a project.) Each staff member works with an adviser. The projects are chosen not only for their intrinsic interest but as a pedagogical exercise as well. To learn how to do research one must do research, but if one is just beginning one must do a certain kind. Therefore, we have tried to find projects that were not only useful to undertake but also gave training in data gathering, data appraising, working out hypotheses, testing and measuring, and so on. Some of the things we do will not be of publishable quality but may be of great value to the person doing them.

Our research programme is, therefore, closely tied to -- is indeed, a part of -- the Training Programme. Here again, it is important to stress that our research efforts are not less advanced or less sophisticated than those done earlier by the advisers, but they are different. The job is most complex and more care is required in formulating projects than was initially thought to be the case. I believe that we have made good progress on our research programme and that it is now well conceived for the objective that it is designed to meet. Our research results are read by a large number of people inside and outside Pakistan and I believe that we can claim to be making a significant contribution to a general and widespread understanding of how the Pakistani economy works.

In general we prefer projects that can be completed in a few months and rarely undertake what is intended to be a definitive study of a general economic phenomenon. This preference rests on several considerations. First, the level of training of the staff usually does not permit embarking on a comprehensive, treatise-like job. Second, for pedagogical reasons we believe it more desirable to examine a small, well-defined issue rather than to set out on a broad, general problem. Thus, over the course of a short period different approaches can be tried, different types and sources of data used, different techniques learned, etc. This we believe to be helpful. Finally, I think the

nature of our objective dictates this type of project. As I have already emphasized, we hope to train people to be practical economists, i.e. to turn out policy useable results. This type of person rarely has time or resources or need to prepare a definitive review of a broad question. This does not mean that we are content to do a superficial job. It means rather that we try to limit a project in such a way that a thorough job can be done in six to eight months. I think our experience to date supports our decision in this regard.

Another important thing to emphasize about our research projects is that the Institute itself decides what should be done. Although we make every effort to keep informed as to what the chief policy issues [confronting the Government of Pakistan] are and what kind of information and analysis is needed for these issues, and to build our research on this information, we do not accept assignments nor do we consider ourselves to be obligated to do what someone else believes to be important. This independence in the selection of research topics I rate as extremely important. At the same time, it imposes on the Institute an obligation to select its research projects with great care and on the basis of a thorough understanding of the needs of the economy and of the economic policy-maker.

Most of our research results are published in our quarterly review The Pakistan Development Review. (The first regular publication of the Institute was called the Economic Digest. The Review replaced the Digest in the summer of 1961.) We publish a spring, summer, autumn and winter number. Although we include articles written by non-Institute people, most of the articles and notes are by the Institute staff. The Review is an important part of the Institute's work. It enables us to make our work available to professional economists the world over for their scrutiny and criticism. This, of course, is the best way to make sure that we are constantly improving the quality of the Institute's work.

We also publish three or four small monographs per year. These are research results of a bit more fundamental kind than are usually contained in articles as well as simply being longer papers. To date, we have published nine monographs and have two in the press now. The monographs, like the Review, enable us to make available to other economists -- as well as to government officials in Pakistan -- our findings.

IV

Let me conclude by listing what seems to me to be those characteristics of an institute that are most strategic in carrying out the objectives of training and research.

1. It must be independent of political pressure and of pressures generated by political issues or by politicians. It is appropriate to

emphasize here that the Karachi Institute has been remarkably fortunate in this respect.

2. Given the quality of the formal education systems as to both teaching and administering, it is necessary that such an institute be outside the customary educational administration. This enables experimentation, which is essential at the present time, and also permits freedom with respect to the development of the curriculum, reading lists, examinations, etc. that we must enjoy if we are to improve. This freedom would surely be lost if we were forced into the regular education administration. An institute cannot, of course, meet all the educational needs of a society, or even the economic education needs, so an overhauling of the general education programme is an essential ingredient of a development effort. Until that overhauling takes place, however, an institute such as the one in Karachi must be on its own. Here, too, we have had good fortune with our Institute.

3. The job of the Director or his agent is crucial. Required is a man who is on top of the field and who has the imagination and understanding to recognise that modifications of traditional approaches are required. Also he must have administrative talent as well. The world supply of such people relative to current demand is such that most institutes must get along with less than the level desired. Our Institute has been extremely fortunate in having Professor Emile Despres as general Director, but I think that the Institute will feel somewhat unsettled until a qualified Pakistani can be freed from other duties to assume the directorship. It is also important that advisers of the quality and quantity required be available.

4. Any training institute needs access to young trainable people. Our Institute pays salaries to its trainees and we compete in the market for their services. This is probably not the best way to get people for training purposes but a more effective recruiting procedure is not immediately apparent.

5. Finally the effectiveness of the Institute depends very much on its publications. I would rate a first-class publication programme as an important part of an institute's work. In particular, I would emphasize the importance of making research results communicable to practicing economists throughout the country. By the same token, poor articles, poorly brought out, will sorely handicap an institute.

On the problem side I believe the chief unanswered question has to do with the form and content of the Training Programme. Much work faces us on this question. I believe, on the other hand, that the form and content of the research programme is in reasonably good shape.

OECD ASSISTANCE IN DEVELOPMENT TRAINING AND RESEARCH

Since it superseded the Organization for European Economic Cooperation (OEEC) in 1961, the Organization for Economic Cooperation and Development (OECD) has been expanding and improving its assistance programs for the developing countries. Among the OECD's new activities in this field is the maintenance of continuing liaison and exchange of personnel and information among development training and research institutes in the developing and developed countries.

In mid-September 1962, the OECD held in Geneva its second annual meeting of the Directors of development training institutes. At the meeting, F. J. van Hoek, head of the OECD's development training section, presented a progress report on the Organization's efforts. Among the accomplishments during the past year have been the publication of a Catalogue of Training Institutions in the Field of Economic Development, describing either in English or in French 32 such institutions in the Member countries of the OECD -- Western Europe, Canada and the United States; the issuance of a quarterly Liaison Bulletin, containing news of activities in development training; and facilitation of the exchange of teachers and experts among training and research institutes. Progress was also reported in the gathering of information on development training institutions in Africa, Asia and Latin America; and in the preparation of a catalogue of research institutions in the field of economic development.

The proceedings and papers of the first annual meeting of training institute directors -- held at The Hague in September 1961 -- have also been published by the OECD under the title of Aspects of Training in Economic Development. A similar volume will be published on the Geneva meeting.

Further information regarding the above-mentioned activities and publications may be obtained by writing to: OECD, 2 rue André Pascal, Paris 16^{e}, France.

INTERNATIONAL CONFERENCE
ON MIDDLE-LEVEL MANPOWER

Attended by official delegations from over 40 nations, the Conference on Middle-Level Manpower met in San Juan, Puerto Rico from October 10 through 12, 1962. The general purposes were to assess the importance of sub-professional skills in economic and social development; to exchange experiences in training and utilizing such middle-level manpower more efficiently; and to arrange for continued international cooperation in the solution of problems in this field.

The Conference was held under the auspices of the United States Peace Corps, and Vice President of the United States Lyndon Johnson and Vice President of the Philippines Emmanuel Pelaez were unanimously elected Chairman and Co-Chairman.

In a summary report issued at the conclusion of the sessions, the delegates to the Conference expressed their broad agreement:

"First, that the modernization of a developing country requires the emergence of an authentic sense of individual engagement in a national effort. In the words of Vice President Johnson, 'The key to success within the developing nation lies not merely in the realm of technical activity. Beyond that, it lies in bringing the city folk and the country folk, the rich and the poor, the scholar and the illiterate into a sense of common purpose and common nationhood.'

"Second, the exchanges dramatized the growing consciousness in developing areas that the problem of development is a common task for all nations; and that in fulfillment of this task there are values of equal importance for the nations which give and the nations which receive such assistance. One striking result of the

discussions was the emerging awareness that, out of diverse experiences and experiments, the developing nations are increasingly capable of assisting one another.

"Finally, it is becoming clear that no aspect of the joint development effort is likely to build this sense of communal purpose and commitment on the world scene more than the face-to-face requirements of creating and diffusing human skills in the decade of development. Solid experience makes clear that the freely-arranged interchange of men and women in these development tasks is making a major contribution to the cause of international understanding, human brotherhood, and peace.

"Out of the struggle of nations to provide modern foundations for their independence and freedom, we are learning the full measure of our interdependence, as nations and as men."

A large number of technical papers were prepared in advance by experts in many of the countries represented at the Conference, and others were presented at the working sessions. The subjects discussed included methods of assessing the demand for and supply of middle-level skills in developing and developed countries; manpower planning and education planning, and their relationships to development planning generally; case studies of manpower training programs in selected countries; and descriptions of the technical assistance programs in this field conducted by international organizations, by the United States and other countries providing aid, and by voluntary private agencies.

A small Secretariat was established in Washington on an interim basis for one year to follow up the work of the Conference. Its work includes publication of the technical papers and reports and preparation of the Conference Proceedings; providing for the international exchange of experience and ideas with respect to the use of volunteers in development work, including Government and private Peace Corp activities by both developed and less developed countries; and facilitating the dissemination of information and experience on the role of private enterprise and of labor and management in the training of nationals of less developed countries in middle-level skills.

Further information as well as copies of the Conference papers may be obtained by writing to the International Peace Corps Secretariat, U.S. Peace Corps, 806 Connecticut Ave., N. W., Washington 25, D. C.

SOME RECENTLY ESTABLISHED TRAINING INSTITUTES

Latin American Institute for Economic and Social Planning

At its ninth session in Santiago, Chile, in May 1961, the Economic Commission for Latin America unanimously approved the establishment of this Institute. Financial support for the Institute has been provided by the United Nations Special Fund and the Inter-American Development Bank, while the Government of Chile has made a building available. The Institute began operations in 1962.

Its purposes are threefold:

Training

Under the United Nations technical assistant programme, the ECLA Secretariat has been conducting an eight-month training course at Santiago yearly since 1952. The course was of a general nature giving emphasis to techniques of programming and project preparation and evaluation. Some twelve to fifteen participants, generally government officials at the technical level, attended each year. The course was reorganized in 1961 to provide training for a larger number of participants and more specialized training. To carry out these objectives the course has been divided into two periods of four months each. The first half is devoted to general programming techniques and the necessary tools needed for planning, such as statistics, national income accounts, project preparation and evaluation, budget programming, administration, and the elements of fiscal, monetary, exchange and foreign trade policy. All trainees participate in this general course. During the second period the trainees divide themselves into groups according to their fields of specialization.

The fields of specialization for the 1962 course include general programming, public investment, industrial, transport and budget programming.

The Institute took over the course in July 1962. Within the next two or three years it is expected to raise the number of participants to at least eighty and possibly one hundred per year. The number of specialized fields will be increased to include such aspects as agriculture, social programming, and natural resources development.

In addition to the eight-month course at Santiago, the ECLA Secretariat has given intensive three-month courses, under the technical assistance programme in individual countries at the request of Governments in order to familiarize a greater number of government officials with planning and programming methods. These courses will also be continued by the Institute on the basis of government requests financed through United Nations technical assistance and other multilateral and bilateral, governmental and non-governmental programmes.

Advisory Services

During the past three years, the United Nations has provided advisory services to several Governments through the ECLA Secretariat. It is expected that the Institute will greatly expand this type of assistance in response to the many requests received from Governments since the Punta del Este Conference.

Research on Techniques

The Institute is equipped to study planning techniques in relation to the Latin American countries. Research in this field will stem directly from problems encountered in advisory and training work, and in turn will be useful in solving them. Special research is needed for improving techniques in such areas as social programming (including education, health, housing and urbanization) for which resources are being increasingly allocated in most Latin American countries. The research programme of the Institute will include studies to establish criteria for allocation of resources in these fields. In addition, the Institute will undertake research on the improvement of teaching materials, including the preparation of case studies and teaching manuals.

* * *

International Center for Management Education

In 1961, the International Center for the Advancement of Management Education (ICAME) was established at Stanford University, Stanford, California, U.S.A., under a grant from the Ford Foundation. Its general purpose is to improve the education and training of managers in other countries, particularly in the developing countries of Africa, Asia and Latin America.

ICAME does not itself directly educate managers. Its work is devoted primarily to the task of training teachers of business management from universities and other teaching centers outside the United States and to assisting them in the development of curricula suitable to their particular needs.

Beginning in July 1962, ICAME started a series of one-year study programs focusing on specific management fields. For the first four years, these programs are: 1962-63, financial management and control; 1963-64, marketing management and distribution; 1964-65, personnel management and employment relationships; 1965-66, production management in industry, commerce and agriculture. Faculty for these programs is provided by Stanford University's Graduate School of Business and visiting professors from leading institutions of management education.

Participants in each year's program will be selected through the existing institutions of management education in underdeveloped countries. Each participant selected receives a fellowship grant covering all tuition and research expenses while at ICAME, and a limited number of travel and living expense grants are also available. The first year's program includes 36 participants from 18 developing countries.

A major part of ICAME's efforts will be devoted to the task of developing management courses and teaching materials relevant to conditions prevailing in the geographical areas in which participants normally live and teach. To this end, it will engage in a continuing program of research designed to adapt existing materials and cases and to provide new materials and cases for use by participating institutions. Participants themselves will be encouraged to prepare teaching materials for possible use both at ICAME and at their home institutions.

* * *

Institute for Training Trade Union Leaders in Latin America and the Caribbean

On the initiative of the AFL-CIO (the national organization of trade unions in the United States) and with the support of national and international trade union organizations in Latin America and other parts of the world, of private foundations, and of public and business leaders in North and South America, the American Institute for Free Labor Development has been established in Washington, D. C. The Institute is under the policy guidance of a Board of Trustees consisting of 24 distinguished North and Latin Americans. A majority of the Board are trade union representatives. The others are public figures and socially minded business representatives that have publicly acknowledged the need for strengthening free democratic labor.

Fundamentally, the Institute has two major educational areas of interest. Its primary function is to work for the growth of free trade unionism in Latin America and the Caribbean area by training selected young unionists in the techniques of union organization and administration and by helping them to transmit these skills to other free trade unionists. In addition, a Department of Social Projects was established at the suggestion of the Labor Advisory Committee of the Alliance for Progress. This Department, through the process of education, will try to assist free trade unions of Latin America in the establishment of low-cost housing, credit unions, co-operatives, workers' clinics, vocational and adult education, and similar institutions. However, unlike the Institute's other educational program, which seeks financial support from private foundations, the Social Projects Department will rely upon the U.S. Agency for International Development for the major part of its funds on a project basis.

1. Training in the United States

   A. From 100 to 120 trade unionsists of the Western Hemisphere will come to the United States each year after 1962 for intensive training programs approximately three months in length, which can be expanded as indicated by experience and needs. In 1962, about 80 trade unionists were trained.

   B. The students are selected in co-operation with local and/or trade union organizations of Latin America and the Caribbean area. They are trained in the dynamics of democratic union leadership. Specific areas of emphasis are keyed to the needs and interests of each group.

   C. Upon returning to their home countries, a limited number of the students who have successfully completed the course in

the United States are provided internships of approximately nine months in length which enables them to provide a full-time service to their fellow workers, with guidance of their respective sponsoring unions and the supervision of the Institute.

2. Field Educational Activities

A. Regional and/or national labor training projects have been and will be established in Latin America and the Caribbean area under the direction of the Institute with the cooperation of the national or regional trade union organizations involved. The Institute furnishes technical assistance and shares in the cost of running such local projects.

B. These local training projects

(1) administer training programs of a short-term nature on labor leadership and union administration. Such programs are keyed and tailored to local situations;

(2) serve as a major channel through which graduates from the Institute as well as qualified U.S. and Latin American experts can be utilized in labor education programs;

(3) are a source of candidates for the Institute's future training programs in the United States.

The actual number of training projects to be established and the kind of assistance to be rendered will depend on existing facilities, local needs and interests, size and scope of programs, and the number of qualified personnel (from the Institute and elsewhere) available for cooperation. Training projects are already under way in Ecuador and Venezuela. Both will be of at least one year duration.

C The basic, long-range objective is to see that every country in Latin America will eventually have an established, well-organized channel to develop and cultivate the leadership potential of promising young trade union officials. In some areas, this will require the augmenting of existing programs; in other areas, it will require setting up completely new trade union training projects. It is expected that graduates of the Institute's three-month program in the United States will lend considerable cooperation to the establishment of such labor training projects in Latin America and the Caribbean area.

3. Labor Centers

The Institute will promote, as part of the labor program of the Alliance for Progress, the establishment of Labor Centers which will serve not only as education centers, but also function as focal points for much of the activities of organized free labor in the area. They will be centers for workers' education and recreation, a base for planning community action projects, and also serve as meeting halls for local unions of the area. In general, they will play a role not unlike the Labor Temples of the U.S. cities.

An immediate goal is the establishment of at least two to four centers, on an experimental basis, with expansion to other areas as experience increases. Currently, the Institute is promoting the creation of trade union education centers in Venezuela and Jamaica. Both projects have already been endorsed by the Labor Advisory Committee of the Alliance for Progress.

* * *

The International Cooperative Training Center

This Center for training cooperative leaders and managers from less developed countries has recently been established by a number of cooperative organizations in the United States and the University of Wisconsin. Supported by these institutions, as well as by financial assistance from the U.S. Agency for International Development, the purposes of the Center are:

- To provide practical training and education in the principles, concepts and practices of cooperative organization, administration, and activities for groups of trainees from newly developing countries.

- To provide short courses on cooperatives and in basic cooperative methods of meeting the needs of people. These short courses will be designed especially for persons charged with responsibilities in their countries calling for a knowledge of the organization and conduct of cooperatives.

- To make of such Center an agency for assembling, supplementing, and disseminating pertinent information and data about cooperatives in the United States and abroad.

- To conduct research relating to the above activities.

Training Methods

In addition to the more conventional teaching methods such as lectures and outside reading, a variety of teaching and training techniques will be used designed to compel participants to make decisions, to act, and to lead. These will include case studies, group discussions of real life situations, problem-solving, and role-playing. In all the longer courses, each participant will be assigned to a given cooperative for a two- to four-week period of in-service training and observation. Each such in-service period of training will be chosen to simulate, as nearly as possible, some important phase of the trainee's major responsibility when he returns to his homeland.

Training Materials

To enable each trainee to become a trainer on his return home, he will be outfitted during his stay at the Center with materials needed on the job back home. This equipment will include:

- a kit of materials suitable for use in his home situation, materials useful in training others
- a set of lesson outlines
- a set of case studies and situations used in the course to illustrate principles and methods
- a reference list of the best literature published in the U.S.A. and other countries, so that he may continue to read and learn after his return home
- similar lists of available movies and other audio-visual materials to use in training others
- a list of available periodicals dealing with cooperatives, to enable him to keep up to date and to continue to learn as he works on the job.

Enrollment

Group enrollments may be arranged by agreement with a sponsoring agency. Each such agreement will specify the qualifications of the enrolees. Among these sponsoring agencies are:

- The U.S. Agency for International Development (AID)
- Other agencies of the United States or other governments
- Cooperative organizations in the U.S.A. or other countries.

- International organizations, such as Food and Agriculture Organization, International Labor Office, United Nations Educational, Scientific and Cultural Organization, the United Nations, or the Pan American Union

- Foundations, labor unions, religious organizations, or other private groups

Individuals, whether enrolled under a sponsoring agency agreement or on their own responsibility, must meet certain requirements suited to the specific course in which they seek enrollment. These requirements will include the appropriate past experience or future responsibilities in cooperative work and may include competence in the use of the English language. Specific academic training or degrees will not usually be required, but satisfactory work by the participant is required for continued attendance at the Center.

Fees for courses will vary with the length of the course. In most cases, the sponsoring organization will pay the fees for its own enrolees. However, fees represent only a part of the total costs of instruction, the remainder being borne by the supporting cooperative, government agencies and the University.

INTER-UNIVERSITY STUDY OF
LABOR PROBLEMS IN ECONOMIC DEVELOPMENT
AND SOME OF ITS RECENT PUBLICATIONS

This extensive research and educational program was organized in 1954, and continues to be directed, by Clark Kerr, President of the University of California; John T. Dunlop, Professor of Economics, Harvard University; Frederick H. Harbison, Professor of Economics and Director of the Industrial Relations Section, Princeton University; and Charles A. Myers, Professor of Industrial Relations, Massachusetts Institute of Technology. Grants from the Ford Foundation and Carnegie Corporation of New York, as well as help from countries in which studies have been made have provided the financial support for the program.

As stated by the four directors of the Study in the Appendix to their book, Industrialism and Industrial Man (Harvard University Press, 1960):

"The objective of the Inter-University Study is to promote and sponsor comparative studies of the role of human agents in the processes of economic development. The purpose is both to conduct research and to help to develop people in different countries as experts in the analysis of industrial relations and manpower development problems. The Inter-University Study has been interested in the past and will be concerned in the future with both research and operations, with fundamental knowledge and policy applications.

"During the course of the next several years, the Inter-University Study hopes to continue and extend both its cross-cut [topical] and country studies. In the future, more emphasis probably will be given to policy issues and to the communication of research findings in conferences. One of the new analytical concerns is the comparative analysis of patterns of utilization of high-level manpower in societies at various stages of development and the critical examination of the role of education in the modernization process. The two objectives of this new interest are to

find a means of making long-range projections of manpower requirements in newly developing countries and to establish guideposts for determining patterns of investments in education which are most appropriate for such countries."

The Inter-University Study has already published, or sponsored the publication of, numerous books, monographs, articles and reprints dealing both with individual country experience and with subjects examined in functional rather than geographical contexts. Among the more general publications are the three volumes reviewed here dealing with labor in the less-developed countries.

Labor in Developing Economies, edited by Walter Galenson; Berkeley and Los Angeles, University of California Press, 1962, x and 299 pp.

Labor and Economic Development, edited by Walter Galenson; New York, John Wiley & Sons, Inc., 1959, xiii and 304 pp.

These two volumes of essays on the growth and problems of the labor movement in selected underdeveloped countries were prepared by the Institute of Industrial Relations of the University of California as part of the Inter-University Study of Labor Problems in Economic Development. Walter Galenson, editor of these volumes, is Professor of Business Administration and Economics at the University of California, Berkeley, and a member of the staff of the Institute of Industrial Relations.

The earlier book contains essays on India, Japan, Egypt, former French West Africa, and Jamaica, Trinidad and the remaining British West Indies. The latest book covers Pakistan; Indonesia; Brazil, Argentina and Chile; Israel and Turkey. All the essays are written by university scholars specializing either in labor problems or in the geographical area involved.

The individual essays follow roughly the same outline, although the treatment of particular subjects varies in accordance with differences in country situations and authors' interests. In general, the essays cover the political, economic and cultural background of the country; the origins, growth, and present size and organization of the labor movement; sources and characteristics of leadership; economic and other activities of the trade unions; laws and government policies affecting organized labor; employers' attitudes and policies and the development of labor-management relations; current and prospective problems of the labor movement; and the authors' conclusions.

Labor Relations in Argentina, Brazil and Chile
by Robert J. Alexander; New York, McGraw-Hill Book Company, Inc., 1962, xix and 411 pp.

Also prepared as part of the Inter-University Study of Labor Problems in Economic Development, this book is a full-length treatment of the author's essay on these three Latin American countries in the second Galenson volume. Separate parts deal with each country and, in a series of chapters, cover the origins, development and present situation and problems of the labor movement.

WORLD BANK LIBRARIES IN ECONOMIC DEVELOPMENT -- FRENCH EDITION

The Economic Development Institute of the International Bank for Reconstruction and Development has begun distribution of the first 100 items in the French-language edition of its library of basic works on economic development. In all, the French edition will contain about 350 books, monographs, reprints of articles, and reference and statistical works on the main aspects of economic development and related subjects. More than 200 of these works have never before been published in French. In many cases, they are translations of works in the English-language edition, but there are also materials newly prepared in French for the Library.

As in the case of the English edition, the French-language libraries are being distributed by the World Bank free of charge to selected institutions in the less developed countries, and are also available at nominal cost to appropriate institutions in the more advanced countries. The cost of preparing and distributing the Libraries is being met by the World Bank with assistance from the Rockefeller Foundation. A bibliography of the titles included in the French Library can be obtained from the Paris Office of the World Bank at 4 Avenue d'Iena, Paris 16^{e}, France.

It is hoped that the preparation of a Spanish-language Library will be undertaken soon.


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